

Me Too Is Not My Style

Challenge Difficulties
Break Through Bottlenecks
Create Values

Update Edition

CORPORATE VISIONS, STRATEGIES AND BUSINESS
PHILOSOPHIES OF THE ACER GROUP

ASPIRE ACADEMY SERIES

aspire
Academy

Stan Shih

**ME-TOO
IS NOT
MY STYLE**

Copyright © Stan Shih, 1996. All rights reserved. No part of this publication may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language or computer language, in any form or by any means, electronic mechanical magnetic, optical manual or otherwise, without the prior written permission of the copyright owner.

Contents

Acknowledgments	VII
Author's Note	IX
About the Author	XI
Preface: The Philosophy of Challenge	XIX
Preface for the New Edition: Learn the Future from the Past	XV

Part One: Building Acer's Foundation

1. On the Road to Starting a Business	3
2. Cultivating Organization Atmosphere	25
3. A Lesson Regarding Intellectual Property Rights	49
4. Breaking the MIT (Made in Taiwan) Stereotype	77

Part Two: Changing Acer from the Inside Out

5. Out of the Snare of Financial Management	105
6. Re-engineering for a New Corporate Life	123
7. Setbacks and Restarting of Globalization	145
8. Long-Term Investment -Sow in Tears, Reap in Joy	167

Part Three: Marching Acer into a New Era

9. Paradigm Shift in the Information Technology Industry	193
10. Acer's Three Major Strategies	209
11. "Go Game Strategy" and 'Stan's Smiling Curve	243
12. Cultivating Talents and the "Passing of the Baton"	267
13. Being a Winner Who Knows How to Concede Defeat	283

Acknowledgments

This book would have been impossible without the assistance and cooperation of many people. In essence, this book is different from others as it is a direct translation from its Chinese original, *Re-engineering Acer*. Compiled based on my narration by Ms. Wennie Lin, senior reporter of *Global Views Monthly*, *Re-engineering Acer* serves as a basis for writing this book. Without it, this book would have taken much more time to complete.

My sincere gratitude to Carol Kao and George Lin, who had spent a great deal of time translating and editing, respectively. Special thanks to Edwin Dy, George Hsu, Joan Clyborne, Jeff Cherry, Mary Reilly, Stewart Lin, Anna Santos, Benerosa Juliano, and Brian Chong for reviewing the translation and providing their invaluable comments. Also, many thanks to Monica Chin and Johnson Chan for the nice artwork and layout they've designed for the book.

Last but not the least, I want to thank all Acer colleagues and business partners around the world for giving me the substance and the opportunity to write this book.

Author's Note

Throughout the history of Acer, we have maintained a consistent focus on cultivating R&D and marketing capabilities. When making investments, we have not been afraid of encountering setbacks. What we fear are duplicated efforts and failing to pass down valuable experience. It is our hope that this book provides Acer's worldwide colleagues and business partners an opportunity to look into Acer's past and future, and serves as a reference for those who are interested in Acer's business philosophy and strategies.

The publishing of this book also coincides with Acer's 20th anniversary and the beginning of the third start-up phase. Extending the concept of "local touch" and "global citizen" from the previous stage, the mission of this stage is to make Acer a global household brand name so that Acer's fresh technology can be enjoyed by everyone everywhere. To stimulate concerted efforts toward this goal, Acer's worldwide colleagues have to truly recognize and implement the spirit of Acer's corporate culture, and maintain a more efficient operation. To achieve this purpose, I believe, words will be the best medium.

This book will be translated into other languages in the future for non-English readers around the world. Different from the past, Acer is no longer a company owned by its colleagues and investors. It has become a company for Acer's partners including banks, suppliers, customers and the general public in every country we operate in. We have to win greater support from our partners and the general public in order to maintain a long-term operation for the company.

Besides helping to build a consensus among our worldwide colleagues and business partners, this book can also serve as a case study for academic organizations, which are interested in learning about the management approach of a leading Taiwanese high-tech company.

It is my sincere hope that the accumulated operational experience and concepts of Acer for the past twenty years are able to bring to the readers enlightenment either in life or in business undertakings.

About the Author
Stan Shih - My Partner

by Carolyn Yeh

My “inside information” about Stan is no more than what other colleagues in Acer know, as most of his time and patience has been concentrated in his work.

Over these past few years, as a result of Acer’s operations being located in about forty countries around the world, we have had to travel a lot together. Stan likes to read and he reads very fast. Most of his time in flight, of course, is spent on reading. When returning to Taiwan and stepping out of the Chiang Kai-Shek International Airport, Stan will routinely be handed a big bag of documents by his driver. He will anxiously start reading them in the car. Talking to him at this moment is like speaking to a wall. After he finishes reading the documents, he will immediately fall asleep.

My better half is so interestingly boring.

Fortunately, his plain personality has never changed ever since I first met him. My twenty-year partnership in Acer has given me the opportunity to share the prosperity and adversity of his career. He doesn't talk much, but his happiness and sadness clearly display themselves before my eyes.

Thinking Big from Small Things

I never thought he would start his own business, not to mention manage a multinational corporation. He was shy and not good in social interaction, nor did he have any ambition while he was in school. However, if there was any clue to his potential skill in management, it should be his outstanding thinking and learning capability.

Stan likes to “exercise his brain”. After pondering, any ordinary thing will generate new meaning. He not only learns from positive examples but also from negative teachings.

For instance, he often attends conferences hosted by the government or other business organizations. People often consider these types of conferences only social gatherings as most statements delivered at them are meaningless. However, Stan is always serious in listening to every speaker, and he tries to offer constructive opinions in return. Because he is so

concentrated on whatever comes to his attention, he always benefits himself from seemingly common statements. His viewpoint is like this, “Even though the opinions of others are so meaningless, at least we can learn how to avoid making the same mistakes in the future. Sitting there without doing anything is a waste of time.”

Attending conferences is a very important learning method for Stan. Over the years, he has often been invited to give speeches in international seminars. After his speech, he would stay and listen to the speeches of other professionals. It not only increases Acer’s exposure but also serves as a precious opportunity for advanced study. He has a lot of speaking engagements in Taiwan as well, but rarely does he memorize speeches. He likes to conduct speeches on a Q&A basis. The reasons are twofold; he can provide opinions catering to the specific needs of different listeners, and more importantly, it is a time for him to “exercise his brain.”

The origin lies in his childhood which had a very profound impact on him.

Stan's father passed away when he was only three. He and his mother, a widow, had a very difficult time in the large family on the father's side. Lacking the ability to fight with the harsh environment, he learned to listen and observe. His mother has been a vegetarian ever since she was born. She single-handedly ran a small grocery to raise her son and make sure he had enough food and clothes. Seeing what his mother did for him, Stan decided to be as determined as his mother. The bits and pieces of his childhood, I believe, did not generate an immediate impact on him, but exercised its influence and formulated his unique personality on a gradual basis during his growing process.

Respecting Colleagues and Stimulating Potentials

Among Stan's philosophies, “human nature is basically good” is the most important core value of Acer. It is partly due to his character and partly due to the fact that his former employer had doubts in his performance. Understanding how it feels, Stan begins by trusting his subordinates. He believes that when subordinates receive respect and delegation, they will fully develop and utilize their potential.

In meetings, Stan usually will not make the first comment. Instead, he will wait for others to express their opinions before he makes his own.

Sometimes, his idea is different from that of others. If subordinates insist on following their own plans, he will respect them and give them a chance. Subordinates usually will treasure such an opportunity and try very hard to prove their views. Their sense of independence and responsibility can often be nurtured through the implementation process.

Of course, not everyone likes Stan's delegation style. Some people still like their superiors to make decisions for them. Sometimes, there will be conflicting opinions among subordinates. Since Stan never makes a decision before he understands the overall situation, he will have the subordinates involved to reconcile their differences. As a result, some subordinates complain that he is indecisive. His reasoning is that making decisions for subordinates will make them rely on the boss, and shirk responsibility whenever they make mistakes. Failing to accumulate experience, their growth and development will be limited as a consequence.

Appreciating Different Opinions

Due to Acer's delegated management approach, employees have been involved deeply in the decision-making process. When different opinions arise during the process, Stan is capable of appreciating different opinions raised by employees. When the employees with different opinions are "attacked" by others, Stan will persuade them, "It is good that we can hear different voices within the company."

With a free and open atmosphere, Stan has to convince them with communication and persuasion instead of instruction in facing challenges from subordinates. As a result, he has to do mind exercise again to conceive a way to express himself. This brings results twofold; first, his communication capability is improved day by day; second, he is able to generate strategies that will make the company better.

A typical example was Acer's altering its organizational structure into various profit centers in 1989.

Before then, we treated all member companies in the group equally so that profit and bonus were equally distributed. However, as each company achieved different levels of performance, Acer Peripherals, Inc. (API, who had achieved better profit, insisted on going independent. Heads of other businesses didn't agree with API. They argued that there were ups and downs for every company. Why become independent at a time when they

were making profit instead of losing money?

As a corporate leader, Stan had the authority to decline API's re7 quest. However, he considered the viewpoint of API understandable, and it was unfair for companies with different levels of performance to share the same profit. Hence, Acer developed a structure for each business unit to calculate its profit independently. This method was initially meant to resolve the dispute with profit sharing, but it turned out to improve the operating performance of each unit, and laid down the foundation for Acer's client-server organization structure.

Treating Fame and Wealth as Passing Cloud

Stan has always been a very simple person. He trusts others, sticks to his ideals and continues to implement what he believes.

In fact, Acer's corporate culture of cultivating successors, delegating authority, and establishing the culture of "human nature is basically good" all reflect Stan's personality. He emphasizes the value of a person and thinks lowly of wealth and power. We lead a very simple life. He is not obsessed with fine food or clothes. He eats whatever is available and buys his clothes on discount.

Over the past few years, I have cultivated a few successors, and planned to be a housewife at home in three to five years. I hope by then Stan will be able to enjoy retirement with me. No matter what, Acer is about to start the third start-up phase, and the company still has much room to improve. I can never relax as long as I am with Acer.

As a partner to Stan, I think he has been doing a great job.

Preface for the New Edition

Learn the Future from the Past

“Me Too Is Not My Style” was my first book. For me, who did not have a good command of writing, this book was a big achievement. With great reference values, this book was very popular and gained quite a lot of recognition, both which had built my confidence in writing. After the first edition, I wrote “Fresh Perspectives” and “Growing Global” two books. Recently, I have just finished another book, “Millennium Transformation—Change Management of New Acer” for the memory of my retirement.

The book “Fresh Perspectives” was published, in Chinese version only, to enhanced Acer employee’s service culture. Acer wanted to change the corporate culture, from a manufacturing-based to a service-based company. I proposed some perspectives on several issues, including enterprise, career, life...etc. In the book, I also provided my viewpoint about the future development of Taiwan. Later, I wrote another book “Growing Global” with contents originated from my teaching materials for the EMBA classes at National Chiao-Tung University of Hsin-Chu in Taiwan. The book was discussing some major issues of internationalization management.

Then, I wrote the book “Millennium Transformation”, in which Acer’s highlights from 1996 to 2004 was recorded, following the first two decades of Acer described in this book. During the eight years illustrated in “Millennium Transformation”, Acer had gone through several significant transitions, especially the second re-engineering at the year end of 2000. The changes of background and decision processes of these transitions were more dramatic than that in the first re-engineering in 1992. After the 2nd re-engineering, Acer has successfully broke the growth limit and created another peak of business.

For the new edition of this book, I added at the end of each chapter some comments, including my perspectives on the previous actions and the later developments. Some changes of the later developments had impacted on the second re-engineering indeed.

This new edition targets the readers, above 30-year old, of the new generation of pursuing career development. This generation is the middle

management in an enterprise now. I hope to give them a complete description of industrial development and let them understand how Taiwan high-tech industries had developed; how Taiwan should go for the future; and how Acer, as a representative company, continuously to conquer the bottleneck, and create values in various environments. This revision is not for my memory, but to record many stories worthy to be discussed by the other companies. When the other enterprises or managements facing a development difficulty, and needing to make decisions for the next step, I hope this book can provide some helpful references.

Practical Business Operation

This book delivers to the young persons an important message that an enterprise should develop a long-term vision, instead of short-term profits. Before public listed, Acer had spent a long time in incubating core competence and therefore had built a solid base for a sustainable operation. On the other hand, some enterprises adopted a short-term thinking model, pursuing the immediate opportunities and profits. For example, many companies, during the Internet bubble times, sold their shares or public listed companies whenever there was a chance. As the objective environment gradually changing and the high-tech companies growing slowly, those short-term opportunities are no longer often available. Building an enterprise with a sustainable base is the best practice. This book exactly provides some practical ways of building business operation.

For the young persons, every individual should develop a long-term vision in such a dynamic industrial environment. The thought of becoming rich immediately through employee stock bonus should be adjusted. In the past, there were many electronics companies that generating many young rich persons after IPO. However, the situation is different now. The high-tech industries have become mature, there are more and more competitors, margin of profit has continuously depressed, and the investors start suspicion the policies of employee stock bonus. The employee stock bonus will be no longer as good as before. While writing this Preface, I learn from some media reporting that there are many companies' stocks pricing lower than their net-values. This is worthy to investigate by those professional managements. Employees and managements should create the values for the enterprise first, and then ask for the stock bonus and higher

rewards. There are many young people do it in a reverse way. They go after a high reward and a high stock bonus and by which they choose their jobs. This will be a fruitless approach.

The readers of this book can realize that Acer had never thought about the profit gain from the premium of public listed stocks. Before Acer IPO in 1988, we let the employees buy the company stock at the price of net value and distributed the bonus according to share-holding. Under this practical policy, we built a solid base, and meanwhile gathered and cultivated many talents as long-term fellow workers. On the other hand, the current employees change their jobs according to the stock price of the company; that will be a barrier for the future industrial development in Taiwan.

A Worthy Journey

Looking back to my career journey, I found the biggest challenge of Acer, from the management point of view, occurring during the period of the second re-engineering, as recorded in “Millennium Change”. However, in my memory, the real events, which I felt breakthrough and having achievements, most happening in the earlier stage, as recorded in this book. I have more vivid impression and still feel proud of Acer’s earlier performance, at which time the environment was relatively poor and resource was not enough, and with few success cases to inspire or refer to.

Recently, the leaders of many Chinese corporations, after more than twenty-year development, have to step down because facing the operational hardship. These are most in the information technology or electronics companies. I feel so lucky. Even the development of Acer has been up and down. We always can find a way of breakthrough. This makes my wish — to retire at sixty — come true. I am glad to hand over my business to the successors while Acer reaching a peak. It is not easy to retire honorably in the IT industries. It is worth to celebrate!

Although Acer has faced various internal and external environments and needed various solutions in different period of times, as described in this book and “Millennium Transformation” respectively, there are several similarities. In both books, we can see a corporate, in a variety of development cycles, grow from nothing to something, from small to big, from single to multiple, and then lose the focus due to diversification. In addition, we can learn from the books: how Acer caught the turning points

of opportunity and re-engineering; the backgrounds and thinking logics of each decision-making as well as all the actions. This book and "Millennium Transformation" are both worthy reference books.

This book describes the situations in the past; however, I think the situations in the past very possibly will be the common status in the future. At this time, this book is much worth to investigate and read thoughtfully in advance. We thus can learn the future from the past.

Preface

The Philosophy of Challenge

I am often asked what my motto is. About five or six years ago mulled over this question and wrote down the following:

Challenge difficulties, Break through bottlenecks, and Create value.

It is my belief that be it in society or on a production line, the highest effectiveness can be achieved once the bottleneck is cleared; a lot of resources are often wasted or consumed due to bottlenecks. The truth is, all bottlenecks are where the difficulties are; otherwise, the highest value would have been achieved much earlier. Therefore, to break through any bottleneck, we have to challenge difficulties to overcome those difficulties' first. This is my basic logic.

However, in challenging difficulties and trying to break through bottlenecks, it is inevitable that one will encounter failures. As such, the willingness for one to face reality and the ability to stand up again when beaten become an important prerequisite in challenging difficulties.

Life itself is a progressive and challenge-filled process in which each stage is closely associated with and connected to the other. Hence, besides learning from failures and continuously enriching oneself, one cannot but adopt certain "strategies" so that while encountering difficulties, one can either reduce the pace or make a detour in order to reach a goal - to achieve a breakthrough. As the Chinese saying goes, "By keeping the green hill there, no fear of no firewood to burn." If breakthrough is not achievable within a short time, one will have to wait patiently or try other alternatives. This is another prerequisite when challenging difficulties.

Acer has constantly served as a testimony to this philosophy of challenge throughout its development process.

Although these views are hindsight, and such precise thinking logic was not derived during the start-up, they are certainly contributing Ctcauses" that have since affected various developments of Acer and myself.

Life's "Causes"

The first "cause" is I am not a "me-too" person.

When I was a child, I was an introvert and did not like to be in the spotlight. And my views were often different from others; neither did I like to follow the norm. In high school, most students wanted to be doctors, and I didn't quite agree with that. At college, everybody wanted to go abroad for further studies, and I found myself in disagreement with that, too. Why should everyone be doctors or go abroad?

Even though my character was a bit refractory, I could not show it as I had been a good student. Daring not to try anything contentious, I had to find some proper ways to use my energy and achieve something different.

For example, I do not always agree that "Chinese are like loose sand" and cannot unite together. After Acer was established, we tried hard to make it a company owned by the employees and break through the stereotype with practical actions. Acer did not agree with the "me-too" style of other Taiwan companies and was thus driven to develop its own innovative way in areas such as creating a brand name business, emphasizing the concept that "human nature is basically good," and letting go of the traditional Chinese family-owned business operation mode. I also believe these methods could help companies break through bottlenecks in achieving continuous growth.

The second "cause" is the discovery of my potential capability which has continuously strengthened my confidence.

While in high school, my academic performance was not outstanding and could only be rated above average. However, during my junior year, I surprisingly won first place in a school wide mathematics/science contest. In fact, I did not pay special efforts to the science subjects; I worked hard on the liberal arts subjects but I did not get good grades in return. This incident gave me great confidence and laid the foundation for my future development in engineering.

After getting into the National Chiao-Tung University for my undergraduate studies, liberal arts was no longer an emphasis for engineering students, and professors were so lenient that everyone got high grades. All scores considered, I graduated with the highest honors and thus entered the University's Graduate School of Electronics Engineering.

My experience in extracurricular activities in college had an even more

profound impact on my life.

I was among the first-year students when the National Chiao-Tung University was re-activated in Taiwan. There were only about 70 students at that time, and we had the chance of “begetting something out of nothing” to a lot of student clubs. I established the photography club and the table tennis team due to my interest in these two areas. Later on I set up clubs for Go game and bridge, and also started the volleyball team and acted as the team leader. During that period, I had the first opportunity to sharpen my inter-personal relationship, leadership, and teamwork skills. It also equipped me with the courage and wisdom to try new things.

For instance, I hosted the first photography exhibit and table tennis round robin competition for all graduate students. Those were all centers of attention around the campus in those years.

After establishing Acer, we were still “making something out of nothing” in entering the microprocessor market or introducing the first PC in the Taiwan market. To promote the new high-tech products, we had to continuously invent the promotion campaigns and maximize the scope of influence. Thanks to the experience -of conducting events during student days, we were never scared when Acer tried out various challenging and innovative ideas thereafter.

Search for Growth Opportunities in Frustrations

The third “cause” is that I made the most of each learning and development opportunity during my career and have since accumulated strength and knowledge.

In my first job, I was an R&D engineer and the projects I undertook bore tangible results. From calculators to an electronic watch pen and a four-bit microprocessor development system, all were the foremost in the country or even around the world. Furthermore, the technology involved became more complicated, larger in scale, and employed higher degrees of integration.

At the beginning of my career, my income never increased. As I did not care about my salary, it increased my chance of being “employed.” I was promoted all the way from engineer to a decision maker. It gave me more opportunity than my peers to encounter and accumulate more experience. More importantly, as I was engaged in new product development, inevitable

failures made me more capable of handling frustrations.

At Acer, although we were faced with different incidents, personalities and strategies, in essence it seemed they were only the repetition and recycling of those “causes” experienced earlier.

Life's process can be built upon such positive thinking as “challenge difficulties, break through bottlenecks, create value” for upward development. But it is also likely to lead to a vicious cycle in frustration the tendency to lose confidence after failure which leads to further frustration. In fact, these two cycles do co-exist, but the stronger cycle in frustration – The tendency to lose confidence after failure which leads to further frustration. In fact, these two cycles do co-exist, but the stronger cycle is evident while the weaker one is hidden. The positive cycle is nurtured through continuous action and implementation. It is enhanced with each utilization and confidence level is increased as well. The vicious cycle comes from hesitation and fear to take action. As your mind is drawn towards the pessimistic side, you invariably feel there is no way out and eventually get stuck in a dead-end.

Therefore, in facing a crisis of negative thinking, it is most important to find the source problem and lead yourself into positive thinking again.

For the past 20 years, Acer has encountered quite a few setbacks and paid dearly for those lessons. I wouldn't be surprised if I am the CEO (chief executive officer) in Taiwan who has paid the highest tuition in learning those lessons. The purpose of writing this book, therefore, is to share my experience with the readers how, in the face of a negative cycle, to find solutions through repetitive self-examination in order to enter into the positive orbits again.

Taiwan in an Advantageous Situation

Besides sharing my personal experience, I would also like to offer my observation on the prospect of Taiwan's future development.

A country's ability to compete is not bred in the bone. In the past, a country could become rich by simply depending on natural resources. Today, rich countries must create wealth through the long-term accumulation of high-quality technologies, management, and system integration.

The so-called “long-term,” from a historical point of view will become shorter and shorter. In the past, a country's rise and fall is calculated on a

hundred year cycle. Now every one or two decades will produce a replacement.

Therefore, the effective development of “brain power” within a nation will decide the prosperity of a country in the future. In generations past, only a few government officials did the “thinking, ” but now everyone has to think. Not only has the “thinking quantity” increased thousands of times more than the past, the fast evolution of technology has further improved the “quality” side of it as well. I strongly believe that, contrary to popular opinion, future generations can only be stronger than the previous ones because of ever progressing and better education and tools.

Under the circumstances, if Taiwan is to make history and increase its competitiveness, it requires the mutual influence of people with the heart to work towards the upgrade of technology, capability and infrastructure.

In recent years, due to fast and prosperous development of the information technology and semiconductor industries, Taiwan’s overall outlook has become very promising. Compared to many industries in the past, the high-tech industry in Taiwan has become more self-reliant in terms of technology, market, management, and capital; it can compete in the international market and does not have to depend solely on the domestic market. As for the background of corporate leaders, the earlier generation of entrepreneurs depended on the country's protectionism policy to prosper, and their main platform was in the domestic market. The young entrepreneurs in this generation benefit from higher education, the government's encouraging policies on investment, and are able to expand their contacts overseas. Comparing these two generations, the newer one is much more equipped with greater global vision and technological innovation.

Fortunately, the traditional Chinese entrepreneurial spirit of “rather be the head of a chicken than the tail of an ox” matches perfectly with the current global “disintegration” trend. Under the complicated international disintegration mode, a company can survive as long as it finds its core competence and is competitive in one single industry internationally. Therefore, Taiwan’s industrial infrastructure which comprises hundreds of thousands of middle-to-small sized companies has formed the basis of Taiwan’s national competitiveness.

Under such a trend, the ability and power of organizing a group becomes very important. The key lies in how a leader can transform and

utilize his or her ideas to consolidate the strength of a group.

In Search of Organizational Competitiveness

I think, to lead a company as a corporate leader, it is important to ride the trend and leverage the strengths of others. As such, one must understand other people's thinking and recognize their expectations.

Acer's first core concept is the vision derived from my long-term observation of society and understanding of the young man's expectation - to "make the dragon dream come true" (the dragon is a lucky emblem in the Chinese culture).

Of course, having ideals alone cannot make an organization work effectively. We must create an environment wherein teamwork can be nurtured. Everyone understands "unity brings strength," but companies with strong centripetal force are few. The key lies in whether members of the company share a common interest.

Hence, Acer's second core concept is to foster a "symbiotic common interest" to help stimulate personal commitments towards the company so that everyone is willing to give their best.

On the other hand, while having a common goal can generate more strength, most people would also like to maintain their own unique thinking and style (that's why most people dislike wearing uniforms every day). Therefore a company must satisfy its members' wishes of being independent and a sense of achievement. Under this principle, Acer keeps instilling a consistent principle of corporate culture into all employees; on the other hand, we encourage the head of each business unit to interpret and implement the corporate culture based on their ideas in order to create differentiation and characteristics. This forms the third core concept of Acer.

However, as the size of an organization gets bigger, the sense of achievement grows stronger, and so does the accompanying risk. How to dilute the risks while the organization expands?

Acer's fourth core concept is to adopt a highly decentralized, delegated management system and employee stock ownership program to achieve the dual purposes of pursuing high growth and sharing risks.

To exercise group power to achieve a common goal, here are the essential points I manage. For a corporation to be big, it must aspire to the pursuit of a common goal; and, to be small, it can encourage individualized

implementation in order to fulfill a sense of achievement. We are trying to find a workable model in the hard-to-balance or even mutually conflicting situation.

In the following chapters, I will explain in detail the process of how Acer, for 20 years, has developed the worldwide unique "Acer Way" in order to realize the shared vision. It includes the corporate culture that resolves the conflict between superiors and subordinates and emphasizes "human nature is basically good"; the "fast-food business model" that reverses the traditional vertical integration approach; the client-server" structure that destroys the hierarchical organization to adopt a decentralized operation; as well as the "global brand, local touch" strategy that shakes off the authoritative multinational management style to implement a worldwide partnership.

These operation philosophies all contradict the traditional control oriented management model, but they are the main reasons why Acer has been able to break out from the distressing conditions caused by the major transformation of the computer industry and achieved another peak in growth.

Some international academic organizations have therefore become interested in Acer's management and wonder how Acer can implement such a comprehensive decentralization and delegation model without having to worry about losing control.

Reverse Thinking to Break Through Stereotype

Following normal thinking logic, by delegating authority, it indeed is easier to lose control. If we think in reverse, however, the ideals we are after can only be achieved by uniting the strength of many people, and we will have to share and delegate. Moreover, most people consider it to be legitimate to share and delegate. As such, the linchpin is to improve the management capability to delegate instead of quitting the idea for fear of losing control. Look at it from another angle. To tie everyone under the same bond to avoid losing control will result in a lack of efficiency in corn any operations and failure in competing with rivals in the market. The company will still end up losing control.

In my personal experience, the utilization of "reverse thinking" when "straight thinking" sinks into the deep end helps us to discover many

alternatives. Further, it is very beneficial in helping to break through blind spots in managing our life and business operations.

For instance, the atmosphere of looking for personal interest is rife in today's society. Based on straight thinking, personal interest is definitely ahead of group interest. However, if reversed thinking is utilized, personal interest can be placed behind the interest of a large group.

It is true human nature that all people consider their own benefits ahead of others. No matter how unselfish a person may be, he still tends to think of himself first. Hence, if we do not aggressively or even force ourselves to think on other people's ground, their benefits 'll easily be neglected. Thinking further, even though we place others ahead of us, will they really be more important than us? I am afraid it is still our benefit that comes ahead. If we do not care for the benefit of other people first, their interest will be completely ignored.

If the CEOs follow the straight thinking pattern, corporate resources will be allocated first to take care of their own interests, then the shareholders, and last the clients and employees. However, Acer utilizes reverse thinking to develop the "Acer 1-2-3" theory. Our order in taking care of the interests are customers, employees, and shareholders.

How much a company is valued depends on the contribution it makes to society. The greatest contribution a company can make to society is to provide high-quality products and services to meet the needs of consumers. To provide high-quality products and services, there must be high-quality employees. And a company has to train and take care of its employees. As such, the successful operation of a company will return the profits to the shareholders; while my interest is then placed behind the customers, the employees, and the shareholders.

I am not advocating any lofty statement; just like others, I still care for my own interest. No doubt, my interest may be divided. But using reverse thinking, if I do not care for others' interests, they will not trust me anymore once their interests are exploited. They will either cease to generate any contributions or take malicious revenge towards the company. This way, I will never enjoy any more benefits in the future. Therefore, placing my personal interest behind others ensures a safer and long-term benefit for myself.

In the following chapters, I will share with the readers some practical examples as to how I utilize "reverse thinking" to break through bottlenecks

in management.

Of course, models feasible in Acer may not be applicable in other companies. I often say that me-too is not my style. It has been my belief that in fast-changing environments, any company should continuously develop the most appropriate strategy for the company based on its available resources and strengths.

This is how Acer has come through over the past twenty years.

PART ONE

BUILDING ACER'S FOUNDATION

Chapter 1

On the Road to Starting a Business

Starting a business was not my original ambition. In 1976, shortly before Multitech (the forerunner of Acer) was established, I was selected to receive the Ten Most Outstanding Young Persons award in Taiwan. In my acceptance speech, I expressed my wish to be a liaison between the investment and the engineering worlds.

I was the highest-ranking officer in charge of technology at Qualitron and my role was to secure capital for technology development. I was not only interested in that function, but also accumulated some experience in giving confidence to our investors when an R&D effort resulted in the reality of a commercial product.

I would not have initiated my own business if it had not been for the fact that my employer, Qualitron, while yet profitable in its calculator business, was about to go bankrupt due to financial difficulties. For the first time, I had played the role of a bridge between technology and market place as an entrepreneur.

A brief review of my early career days will tell how all things have come together in their own times.

Accumulating Experience in Career Days

Straight thinking: The excessive expansion of interest and power will greatly reduce that of the employer.

Reverse thinking: Educating employees on how to protect their interests will help benefit the employer.

Thinking logic: Employees will do their best toward the company's existence in order to secure their own interests; they will obtain greater interests of their own as they make more aggressive and larger contributions to the company.

In college, my goal was to become the president of the National Chiao-Tung University in Taiwan where I received my master's degree. My plan was to continue to study for a doctorate degree after finishing the Electronic Engineering graduate school, with a teaching job on the campus.

Back in those days, going into business was not what the doctorate or masters degree holders normally did. They usually went on to become professors (I never thought that, one day due to international competition and technology innovation, qualifications for conducting business would require much higher education).

Alternatively, those getting master or doctorate degrees overseas could opt to stay abroad to work. Since I did not intend to go abroad, the goal of being a scholar was a logical choice for me.

In 1966, as a sophomore, I saw the entry of some foreign electronic companies to Taiwan, including Philips and General Instruments, who set up manufacturing operations. These companies recruited post-graduate students from campus with a monthly salary of US\$200 (about NT\$8,000, an admirable pay at that time). During those few years, Taiwan's electronic industry had just started to take off, consisting mostly of foreign-owned assembly plants and Sino-Japanese joint ventures for home appliances. It also marked the first time graduate students did not have to go abroad and had the opportunity to work at home. Following my master's degree in 1971, I gave up the idea of studying for a doctorate degree; and instead, I prepared myself to enter the workforce.

I had two offers at that time. One was Philips in Kaohsiung City in the south, the other was Unitron Electronics in Hsinchu City in the north. Both companies had senior Chiao-Tung alumni working as executives. I chose Unitron. On one hand, I considered my English not good enough to work for a foreign company; and on the other hand, Unitron had been invested in by the famous Lin family of Chang Hwa county, my hometown. The Lin family first invested in the cotton and textile business, and later established a semiconductor assembly plant, encouraged by Chiao-Tung professor Mr. Ming Shih, and alumnus Mr. Wei-Shian Chien. The plant was managed by Mr. Andrew Chiu, also a Chiao-Tung graduate. Most important of all, Unitron was the first company in Taiwan with an R&D department and I had the opportunity to apply what I studied in college to the R&D field.

There, I developed Taiwan's first electronic calculator.

I was not the first person at Unitron to develop calculators, but I was the first one to have it commercialized. What I did differently from my colleagues was, besides designing the circuit board and making it work, I added the concept of packaging and cost analysis.

I asked an industrial designer to do the casing design, and an acrylic-plastic signboard maker to make a model for the machine. I then worked on an analysis of the material cost in a report. The procedure looks simple today, but it was exceptional twenty years ago.

When my superior saw my non-technical report, he decided to commercialize this product and to make a further investment in volume production.

Regrettably, this product did not hit the market. One reason was the unstable quality of the imported Japanese keyboard pressing a key would display a string of figures. The other reason was that the Taiwan-made circuit board often shorted. I was hoping against hope to improve this product; but I was promoted to the manager of the semiconductor assembly line, thus ending any possibility of improving that product.

From R&D to production line, my function was transformed from an engineer who only had to manage himself to someone who had to lead more than 800 people. My job became more complicated. The company also began to notice problems of different cliques. Although the working environment was not as simple as before, I was able to continually improve communication between my superiors and subordinates. I often went to the foreman or section manager whenever I had questions, so I was still able to perform my job well, and my relationship with others was satisfactory. Moreover, since I did not care about my salary (I was still paid the same starting salary of NT\$7,000 when I left the company), I was promoted to director earlier than my seniors and was responsible for the whole manufacturing department, which provided me invaluable management experience.

Though it was only less than one year after college, I had a strong feeling that to grow in an organization, there would have to be two important prerequisites. First, it is important to maintain good relationships among peers and never to take sides with any clique. Conflicts can put you in a disadvantageous position.

Second, we must have a sense of responsibility. I don't think any

supervisor will expect a subordinate to not encounter problems on the function assigned. What the supervisor anticipates is a safe delegation, trusting that the subordinate will be accountable, do his best, and reflect when there are problems. A person having only talent and ability may not be dependable, but one with a strong sense of responsibility is trustworthy.

Qualitron Success and Failure

I had been at Unitron for about a year and three months when Vincent Lin, the third son of the Lin family, invested in another company called Qualitron and invited me to join the start up company. Qualitron was positioned as a professional manufacturer specializing in calculator manufacturing, with its own brand name and OEM business. With its own brand name, technology and stable profit, it was one of the most popular companies at that time. We created for it a reputation as “a company for young people,” where the employees could freely develop themselves and be creative.

Such was the ideal environment I was after in career days: working together with a group of partners who shared the same goal, and contributing our intellectual and technological results to the society. In return, all participants enjoyed a sense of achievement with their lives thus enriched.

I consider myself well versed in the electronic engineering business. But from another point of view, Vincent Lin was indeed an instructor who enlightened me in many ways, particularly in his marketing concept. He had an observation which I still admire to this day. Comparing the industry to a river, he thought that Taiwan enterprises were trying their very best to operate in the middle and upper stream, but failing to invest in the downstream the marketing side. It was like a river flow getting blocked downstream, with products that they spent efforts to produce flowing all over and needing to be sold at a cheap price (this is the result of being un-able to break through the bottleneck). Affected by Vincent, I introduced the concept of “backward integration” when Multitech was established. That is, Taiwan has to achieve a certain capability and control over the international market. If we are able to establish a brand name and marketing system downstream, we will be able to develop and

advance towards assembly in the middle of stream and key components up stream.

During my four years at Qualitron, I finally fulfilled my wish that had been unfinished in Unitron. I successfully developed the first hand-held calculator in the country. The first electronic pen watch in the world was also introduced (see Chapter 3).

However, the most far-reaching impact Qualitron had on me was the closing down of its operations.

As president of the company, Vincent Lin was responsible for marketing and industrial design; while as the vice president, I was responsible for R&D, manufacturing, business development and purchasing. Profits were stable all the time. However, the chairman, who was Vincent's elder brother, was in charge of finance. He diverted the money that Qualitron borrowed from banks to support his family's textile business. It was during the worldwide oil crisis and the textile industry was in great difficulties. The Lin's business suffered losses and it finally forced Qualitron's operation to go under as well.

When the company's operations began to show deterioration, I went to see the Lin family together with my colleague in charge of accounting, hoping to prevent the company's finances from deteriorating further. However, the response we received was that the company was owned by the family and they knew what to do. We could do nothing but give up our attempt.

The closure of Qualitron cast a shadow on my ideals of being the bridge between capital and technology. Nevertheless, I had also acquired precious lessons which were converted to important management concepts in Acer later on. First, to maintain a stable financial management, and second, to take care of the employees' interests.

Maintain Prudent and Solid Financial Management

Like many family businesses in Taiwan, the Lin family lent its family money to the company (a so-called "shareholder transaction") as the original capital amount was not sufficient. This is an example of making a long-term investment with short-term capital. Even though the loan from the family is short-term, no matter who the lender is, it is still a liability and detrimental to the company's long-term development.

On the other hand, as its business grew very quickly, Qualitron had to secure more bank credit and borrow more money. Uncontrolled credit expansion coupled with fuzzy capital utilization between family and company turned the healthy company into a mess.

From this experience I learned that to maintain stable financial management for a company, not only are sufficient assets necessary but the various cash sources also have to be clearly defined; be it short- or long-term assets, accounts payable or stockholder's equity, the company cannot grow steadily without having a sound asset structure.

To further maintain the company finances in a secure position, we have to establish a management system for customer credit.

In my early days at Qualitron, I was only responsible for R&D, manufacturing, and purchasing. Later on I was asked to cover domestic sales as well. No sooner did I take over the job than a key distributor requested an extension on his payment. After continuous delays, it became a bad debt and the distributor went broke.

This type of trick was often played by distributors in Taiwan. They would ask their suppliers to extend credit, and, at the same time, collect cash from their customers. They would use this money as working capital to invest in other businesses (another wrong example of making a long-term investment with short-term capital). Once the newly invested business did not go well, the cash would be tied up and, eventually, endanger the original business and its suppliers.

The experience also explains that domestic business and export business do require different sets of know-how. While successful with export business which is backed by Letter of Credits, many Taiwan companies often meet setbacks in the domestic market as they fail to establish a good credit management system.

In light of this, Acer demanded its distributors provide collateral before any product delivery when the Microprocessor I Learning Kit was first introduced in Taiwan so that the chance of bad debts could be reduced to a minimum.

There is a trap in managing a business. Business owners often fail to distinguish whether the capital is from their own pocket, from the banks, or from the vendors. They would proceed to make investments with whatever cash is available, forgetting that the cash is actually accounts payable or short-term debts. My personal observation demonstrates that

most Taiwan businessmen are inexperienced in this regard. Even experienced ones can easily lose their minds amidst the flow of money. Many people start a business laboriously and enjoy a transitory success, but end up bankrupt without even knowing the reason why.

These personal experiences helped me understand some basic principles in financial management. After Multitech's start-up, while we did not have ample cash, we never overlooked the soundness of our financial structure. Although it was inevitable to encounter setbacks in our growing process, we were able to overcome the difficulties eventually (see Chapter 5).

Treating Employees Kindly and Prospering Together

Here is another enlightenment from my earlier career. The company must treat its employees kindly and set up a channel for them to express opinions.

At Qualitron, all employees were very dedicated to their work and had high expectations for this young people's company. However, due to the company's inappropriate decisions, employees' anticipation fell apart, career plans changed, and they ended up looking for other jobs. This is very unfair to employees: a company's success or failure concerns not only the owner's capital but also the employees' effort, livelihood, and future.

In this line of thinking, Acer was the first company in Taiwan to offer an employee stock-purchasing program after its third year in operation while the program was still new to other Taiwan companies. The objective was to create an environment in which the employees prosper together with the company. Meanwhile, everyone was allowed to express his or her opinions; with every dollar they invested, they were entitled to express themselves as shareholders. A company will be less likely to make erroneous decisions under this structure.

On the other hand, to treat employees well, the company should not saddle employees with unreasonable business risks; instead, it should aggressively establish a system to protect the employees' interests.

Back at Qualitron, I was offered certain technology shares and a seat on the board of directors, but at times I was asked to be a guarantor for the company. The self-consciousness of an employee at that time was not as strong as it is today. As I was young and did not have to contribute any

capital to the company, I was flattered by such an offer and did exactly as asked. Fortunately when the company went into trouble, the Lin family shouldered all responsibilities or I would not know what I would have done.

Owing to this experience, I never ask Acer's top executives to provide guarantees for the company. I feel that their salaries do not match up to the risk they have to share. Also, Acer never offers technology shares to our employees, but instead they are invited to participate in the stock purchase program. They were also informed beforehand that by participating in this program, they would prosper or suffer together with the company, and enjoy the eventual benefits together. Back then, the offer of technology shares was only existent in Taiwan companies and the authority to grant such shares belonged to the business owners. The employees' benefits are not truly protected in this way and it is usually an empty promise.

I remember vividly in my mind various lessons from my early career, and have since transformed them into systems for protecting employees and the company. Never have I exploited the employees and benefited myself with these tricks.

Moreover, we commence from the basics by imparting the notion to employees of protecting their own interests (see Chapter 13). It is my sincere hope that Acer employees know best how to protect their benefits.

In many CEOs' minds, the over expansion of employee interests will affect their own. But I believe, if the employees understand the importance of protecting their own interests, they will exert themselves in maintaining the company's operations, as their interests will vanish if something should go wrong with the company. On the other hand, employees will do their best to contribute in order to create greater benefits for them-selves.

These early career days bring me deep feelings. Family business makes up a lion's share of Taiwan's economic infrastructure; and the rise and fall of a business often goes hand in hand with that of the family owners. When a business encounters difficulties, it is also a time when differing opinions arise. A company stands a better chance of conquering difficulties if family support is available. Qualitron, at its start-up phase, also turned loss into profitability with the support of its family. However, with family members as the center of the decision-making body, it tends to generate

opinions which are neither balanced nor objective. Once a wrong direction is taken, it will be hard to turn back.

For this reason, how to maintain the advantages of a family business and eliminate its shortcomings at the same time was my most important mission after the establishment of Multitech.

Collective Entrepreneurship

- Straight thinking:** Management plays the role of business owner to ensure the high efficiency of the employees.
- Reverse thinking:** Management plays the role of partner with delegated operations to bring even higher efficiency.
- Thinking logic:** With fast changes taking place in the industry, if the employees cannot be responsible for them-selves but have to second-guess the supervisors before any move is made, it will result in incorrect decisions and delayed responses.

While at Qualitron, my superior had great confidence in me when things went well, and I worked very hard in return. However, when the company started having difficulties, my employer once questioned whether my purchasing price of materials was too high. I worked hard and did not ask for extra rewards, but I absolutely would not like him to question my loyalty. This was the first time the thought of leaving Qualitron occurred to me.

During the second half of 1976, as Qualitron's financial problem became irremediable, George Huang, Fred Lin, and I, who were in the R&D department, had to leave the company. Together, we hastily founded Multitech with the initial target being the new microprocessor market.

At that time, we thought there was a very promising future for the product. If an engine is the muscle of a machine, the microprocessor will be the brain of the machine. The invention of engine had brought about the Industrial Revolution; and likewise, it is foreseeable that the birth of microprocessors would be another turning point in industrial development

history. The Chinese, having missed the first Industrial Revolution which resulted in the weakening of the country, could not afford to miss the opportunity again. We intended to promote the technology of microprocessor machines in the Taiwan market.

From my experience at Qualitron, I became the first business executive in Taiwan to have a profound understanding of microprocessor machines. In 1974, I invited several professors to Qualitron to give lectures on computer digital technology to those engineers who had never learned how to use a computer before. To give everyone hard training, the teachers were requested to lecture in English. My colleagues, Fred Lin and George Huang, who are among Multitech's five co-founders, also joined the class.

Ken Tai, another co-founder, also shared the same passion for microprocessors. He was working at Mitac handling Intel products at that time. We became acquainted when he came to Qualitron to promote Intel microprocessors. Ken joined us afterwards to found Multitech.

It is now often mentioned that Multitech had five co-founders: Fred Lin, George Huang, Ken Tai, Carolyn Yen (my wife), and me. There were de facto two other gentlemen: Tu, Chin-Chuan who specialized in industrial design; and Shen, Li-Chun who majored in business administration and whose English was very good. The initial capital was NT\$1 million (around US\$25,000; my wife and I had 50%, while the rest held 10% each). With eleven members and a rented apartment of about 1,200 sq. ft., we began the process of "collective entrepreneurship."

After one year, however, Tu and Shen left Multitech. Their departure had a considerable impact on the company, but it also helped us to concentrate on the development of computers thereafter.

Verbal Agreements

There were three basic businesses when we started Multitech: Tu's industrial design, Shen's overseas trading business, both of which generated returns very quickly; and the microprocessor-related business for the rest. The microprocessor industry was only at its early stage; we kept investing in it but achieved minimal progress. It cost us almost 75% of our capital to buy a microprocessor development system, hence the company could not make both ends meet. The whole company almost had

to rely on the industrial design and trading business to survive. Tu and Shen decided to leave probably because they considered it not worthwhile.

With their departure, they took away the business of industrial design and the high-profit telephone jack (which later became an important ex-port item for Taiwan). The five of us continued with the microprocessor business, believing that's where the future would be.

We exchanged a lot of opinions among ourselves in the beginning of the business and reached a certain consensus with a gentleman's agreement.

First, if the company was not able to survive, some would remain while others would look for jobs outside to subsidize the operation. At that stage, my salary (monthly salary of NT\$30,000) was cut by 50% while the rest took a 20% reduction. My wife was not paid for two years in order to lower cost and help the company survive longer.

Second, in the initial stage, I would function as the chief executive officer. But if I was incapable of leading or my financial capability became weak, we would have to find a replacement.

The third was, if my decision was not approved by over half of the partners, it would be overruled even though my wife and I together had 50% of the shares.

In other words, before incorporation, we had already established the corporate climate of positioning the company interest ahead of the personal interests. We made it clear that Acer would not follow the traditional pattern of a family-owned company and it was our ambition to respect the minority shareholders.

This implicit agreement indeed laid a mutual-trust foundation for Acer's reorganization effort in later days. It was evidenced in the transition of executives. Later, Leonard Liu was hired from IBM to be Acer's president, and after his resignation, the second-generation executives were able to quickly move up and the co-founders stayed in the background. Thanks to the seeds we sowed on the first day of Multitech, everything went extremely smooth during such transitions.

Moreover, we formulated an important fundamental creed: to upgrade Taiwan's industry, we have to focus on R&D, brand name products, and international marketing. Otherwise, our long-term competitiveness and stability would eventually be weakened. Hence investment on cultivating talents in these few areas cannot be spared.

As I recall, Acer has devoted substantial resources on employee training. Besides setting a foundation for Acer's healthy development after-wards, many of those who left the company over the years have since made impressive performance in the industry, which can be regarded as Acer's contributions to the computer industry as a whole.

Obstacles in Brand Name Business

In the early years, it was not easy to develop a market for microprocessor-related business in Taiwan as the market was still barren. Constrained by financial capabilities, we started with trading and consulting business.

Making a fortune from a consulting business was not easy, but it sufficed to maintain our daily expenses and helped to amass experience. During the first five years, we had designed forty applications based on microprocessors for our customers both at home and abroad. One deal worth mentioning was the video terminal design business for ADI Electronics in 1980 (executed by the current API president, K.Y. Lee). This was the first microprocessor product in Taiwan that exported in volume.

Companies like Tatung and Teco were also engaged in terminal development at that time but failed to accomplish product commercialization. Mr. Liao, chairman of ADI, held a different view in that he was courageous enough to invest millions to make plastic tooling models, and the company was immediately capable of volume production. Other companies with only hand-made samples had to wait another three to six months to ramp up volume after orders were placed. Considering availability and commercialization factors, customers naturally selected ADI.

While still small in size, Acer was able to grasp the latest information on new technology and materials on a timely basis; both the quality and cost of our products were much better than that of other competitors. Leveraging the strengths between the two companies, ADI was able to earn the reputation of being the pioneer in exporting Taiwan's IT products in volume.

For this deal, we also changed our way of billing. Instead of adding some profit to the cost, it was changed to billings on cost first, and later

on royalties (based on sales volume). The income was less in the beginning, and we also had to risk failure of market development. When ADI was finally successful in its business, our income was much more than expected, which contributed much to our later development.

On that deal, we had the intention of promoting the ADI brand for them, but what they desired was volume OEM business. Though we had signed exclusive rights for distributing ADI products overseas, we had to defer such an idea. In fact, during the first five years of Multitech, we had had the intention of promoting brand name products for Tatung and Teco. But in reality, these companies were in need of large orders. Since they showed little interest in promoting brand name business, we had to abandon the idea.

The dream to promote a Chinese brand name finally became a reality in 1981 when Multitech launched the Microprocessor I Learning Kit. We successfully established the Multitech brand name and an international marketing network through the self-developed product.

Gardener of Microprocessor Machines

Besides industrial design, consulting and brand name product, trading was also one of Multitech's focused businesses in early years. We distributed the electronic components of Texas Instruments to the arcade game machines manufacturers in Taiwan, which happened to catch the arcade game fever at that time. Before the government massively banned game machines, it was a huge business for the company.

We imported from the US the microprocessor components and development system (the computer used to develop computers) to Taiwan. It was quite an effort to promote such products as the general public had no idea what a microprocessor machine was, and the market was practically non-existent. Quite a few jokes occurred at that time. For example, some customers presumed we were selling some kind of machines for gardening when we paid them a visit. Some salespersons even called on us to sell gardening books. What happened was: We dubbed ourselves the "gardeners of microprocessor machines" to promote the new concept and cultivate the potential market in Taiwan like a hard-working gardener.

To overcome such a problem, we set up training centers focusing on

microprocessor technologies, and also published the monthly publication, *Gardener's Words*, to educate the consumers about the technology and applications of microprocessor machines.

Training centers were opened simultaneously in Taipei, Taichung, and Kaohsiung in 1978. Within four years, about 3,000 engineers took the 50-hour course. These engineers were taught how to use assembly language to control microprocessor-based circuits for such applications as traffic light signal or machine controls.

The opening of training centers had a profound impact on both the industry and our company. Through these courses, engineers who had never used computers before were able to utilize the new knowledge right after class and made a significant impact on the eventual popularity of microprocessor technologies in Taiwan.

Many of those lecturers have now become important executives at Acer; Acer's IPB president, Simon Lin; Acer Peripherals, Inc's vice president, Hero Chiu; Hsinchu factory site general manager, M.Y. Lin; and Acer America vice president, Max Wu. They were teachers in the evenings and salesmen during the day. Many of their customers were their own students. Through sharing of the same language, the promotion of business went smoothly.

Later on, as the courses in the training centers received good comments, some large-size government and private organizations took the initiative to invite us to open on-site classes. Our lecturers carried with them the machines to conduct classes for different companies, and the market for microprocessors was gradually developed.

By 1979, we had accumulated a certain number of customers, so an after-service system had to be established. We therefore published the monthly, *Gardener's Words*, for maintaining contacts with our old customers, a very cost-effective way. On the other hand, as microprocessor machines were still not popular, it was difficult to identify customers and generate new business. We had to go through a large quantity of publications to develop potential customers.

The initial circulation of the publication was 2,000 copies and it finally reached 20,000 copies. Once a month, all colleagues had to help out with the packaging and mailing of the publication. As it was given away free, we were losing money on this operation; but it certainly helped generate a positive image and enhance Acer's popularity and influence.

Cultivation on a Long-Term Basis

The training centers, the Gardener's Words and other kinds of similar activities are the strategies I adopt very often which require long-term efforts but not large expenditures. In later days, we continuously promoted education about information technology and started promotional programs. For instance, we hosted a traveling exhibit on the Microprocessor II in Taiwan's 21 counties in 1982. Everywhere we went, local residents rushed in to observe the latest technology. In 1986, we held the nation's first "One thousand computer classroom" activity in Kaohsiung which attracted an audience of 100,000 to try a hands-on experience. Besides, the international Go-game contest, Long-Term Thesis award, and the students' computer summer camp were all firsts for Taiwan enterprises.

I have discovered that most people understand the importance of such promotion, but few (including Acer employees) can get the knack. The executives often fail to comprehend the secret of such investment as they do not see a direct and concrete return. Most executives would question time after time: Where is the benefit? Of course, a company can't survive investing all the time and get no returns. However, I believe so long as the general direction is correct, investment adjustment (yet maintaining the same direction) is tolerable if resources are indeed limited. For instance, while running, we can slow down the pace but we can never stop completely or change course. Many companies often work towards the right direction halfway, and stop or take another approach when they feel it is fruitless, which in turn results in a waste of resources.

Just because it is a long, indirect and non-concrete process, executives should recognize that this process is different from the process of returns on tangible investments; and they cannot apply the formula for return on hardware capital investment. It trades concrete resources for intangible opportunities, and has to go a long way before intangible opportunities can transform into palpable returns. That is to say, the executive should set his sights far above and cultivate with patience. It will not bring sudden huge profits but will produce long-term effects and benefits.

The Culture for “Poor Young Men”

While examining the company’s early history, one of our peer companies—Mitac—cannot be ignored.

For a long time now, both companies have often been juxtaposed and compared against each other. Mitac was established before Acer, and had a strong financial background from the Miao family’s petrochemical business. Its line of products included Intel’s microprocessor machines and Digital Equipment’s minicomputers, which were the most powerful products in the Taiwan market. Under the circumstances, it would be imprudent for Acer to go into direct competition with Mitac. Instead, a different strategy had to be devised.

In terms of product strategy, as Mitac was aggressively investing in system integration for information processing, Acer went a different direction and shifted to the design of microprocessor application products. Acer’s absence in the Chinese computer market in the early years was also due to the presence of Mitac in the same field.

There is a “poor young men’s culture” in Acer’s corporate culture which is used to differentiate Acer from Mitac. As it was inevitable that some Acer employees would make a comparison between the two, and in order to help the employees realize that Acer was different from Mitac, I continued indoctrinating the employees and emphasizing the “shortcomings of being rich” being rich could sometimes lead to being wasteful and bloated. Taking this opportunity and concepts such as maintaining a sense of crisis and watching every penny you spent were also in-stilled into their minds. Unfortunately, we almost faced the same problem of being rich following Acer’s IPO in 1988.

Multitech’s early years were spent, to some extent, following the footsteps of Mitac. Later on Acer introduced the Microprocessor Learning Kit, and Mitac came out with the Little Mitac. Acer began to concentrate on export business while Mitac focused on the Taiwan market, a parting point of the two companies. Thereafter, Acer has since become the first PC manufacturer in Taiwan and formally laid down the leading foundation in Taiwan’s computer industry.

Playing with an Open Deck

During the initial start-up stage, there were two salient crucial aspects, which contributed to the operation's success. One is the "trend" the general direction; and the other, the strategy and speed. If business is moving in the right direction, we have to advance with confidence and conform to the trends. However, the tuning of speed is also important even if the direction is accurate. Moving too fast will consume too much energy and make it arduous to reach the destination. Moving too slow will fail to grasp the timing and opportunity. Thus the corporation's capabilities have to be carefully evaluated while moving forward with strategy.

What is more important is that for a company to accomplish a long-term and sound development, mutual trust and cooperative relationship must be established among the partners and employees.

Taiwan's entrepreneurship is most often the result of collaboration among a group of friends or schoolmates who share the same ideals. In a structure like this, each partner has to specialize in certain areas, perform his job well and build up a consensus. Otherwise it would result in the overlap of functions, lose focus on decision-making and finally fail altogether. As a result, I believe that a single decision-maker is needed for a start-up business. If the business succeeds, he will accordingly take more credit. If it fails, it's inevitable that the leader has to take greater responsibility. This model successfully adopts the benefit of family business in terms of "respecting the elders." However, to prevent from falling into the arbitrary dead-end, as in a family business, the leader must respect the opinions of his partners.

One of my management philosophies is "playing with an open deck" clarify the game rules in advance so that it will be easier for everyone to play the game as a team. This is why we had a gentleman's agreement among all co-founders with all the game rules at the beginning of Mul-titech's business. I am convinced this had a significant influence on Acer's corporate spirit of strong self-initiative in later days.

To be honest, it is easy to have division of labor among partners in an organization; but difficult to build up the required mutual-trust to function effectively with a division of labor.

A very important concept has existed since the early start-up time of Acer's collective entrepreneurship, even to the promotion of employee stock ownership later. Though I am the CEO, I deem myself a partner instead of a "boss." This is the hinge on which Acer is able to establish mutual trust.

For instance, due to partnership, the employees will not be reprimanded for "losing my money" if they make any mistakes. Everyone takes a fair share on the loss, and I simply get a bigger share. In other words, as long as the boss thinks that "you are spending my money" or "I have the right to decide how to spend my money," the mutual trust in the organization will be completely destroyed as a result.

The working relationship in an office is always very delicate. We all share the same experience that sometimes the employees' endeavors will fall behind the expectations of the superiors. A careless remark by the superior such as "Is that all you can do?" will often bring frustration or even annoyance to the employees. Since I am part of the partnership and I am fighting together with my colleagues, whatever my expectations are about the business target, I have to communicate with them and get their consensus beforehand.

Whenever the business target set by the employees is below my expectation, I will still agree to their proposal. In fact, there will be competition among colleagues privately. If a low target is proposed, that employee will inevitably "lose face." In order to "save face," most people will still propose a reasonable target and work hard to achieve it.

Put it this way. If the organization is established according to the relationship of employer and employees, it will not achieve a satisfactory result in profit sharing. The employer will always have the mentality that he gives too much. The employees, on the other hand, will feel they give much more than they take, and the employer is pocketing all the profits. The organization will eventually fall apart and lose motivation to improve. There doesn't appear to be any good standard to follow in a case like this. However, if it's a partner relationship, based on the spirit of profit- and risk-sharing, employees will not complain even when they get a smaller share.

In fact, the reason that I do not consider myself a boss is also for my own interest. If the CEO considers himself the employer, he will expect his subordinates to simply follow his instructions and be "yes-men". IT

industry is a dynamic and volatile business. If all the employees cannot be responsible for what they do, but simply follow every instruction given by their boss, the development direction will be led astray, and efficiency will also deteriorate. I do not like my colleagues to be "yes-men"; neither do I like the idea of being treated as a "boss."

In conclusion, to encourage colleagues to take up their own responsibilities, the CEO first has to trust the employees or they will always perform their jobs by following instructions. This is the ground upon which Acer places the concept of "human nature is basically good" at the forefront of its corporate culture.

*Chapter 1***Comments by Stan Shih at Year 2004**

- A stable financial management is the key to keep an enterprise continuously developing after founded. I had proposed a viewpoint “borrowing money definitely die” to many young friends in a camp. The viewpoint may not sound logical straight from the wordings. It means that if you borrow a short-term loan for a long-term investment, while business operating not smoothly, this action will induce a corporate crisis. If a corporate does not change the habit of borrowing money, the corporate will go out of business sooner or later. I have been thinking the same way since I founded Acer twenty-eight years ago. The South Eastern Asia financial crisis in 1997 was attributed to this kind of money-borrowing business culture.

- While I founded Acer, it was hard to raise the funds. I counted every penny. Now days, the venture capital is well developed and raising the funds is a much easier job. The founder members thus spend the money in a relatively careless attitude, which is not favor to a success of a new business neither a sustainable operation.

- We Acer founders, while the start of the business had three agreements: first, if the company could no longer sustain, some of us would stay with discounted salaries while the others would go out finding a job to keep the company running. Second, I would be the leader at the beginning. However, we would find someone else to lead the company if my leadership or financial capabilities would not be enough. Third, although my family owned half of the shares, my decision could be denied, if it would be against by the rest of the partners. Actually, these agreements had brought into the concepts of corporate governance. We had started to mold a corporate culture of respecting corporate governance while the company size is small. This is an important reason that Acer can go through all the challenges for almost thirty years and never decay away.

Chapter 2

Cultivating Organization Atmosphere

After passing the difficult stage as a start-up, The Acer Group entered into a growing phase in the 1980s. The first spin-off company, Multitech Industrial Corporation, was established in 1981. We set up our first manufacturing plant in the Hsinchu Science-based Industrial Park, Taiwan's so-called "Silicon Valley." By 1991, we had become a group of five distinctive operations in Taiwan: Acer Sertek, the company in charge of both domestic sales and distribution (first company in the group); Acer Inc., our PC manufacturer (later became the parent company); Acer Peripherals, Inc., the company that focused on OEM business; Acer TWP Corp., our software and publishing arm (forerunner of the monthly *Gardener's Words*), and Multiventure Investment Inc. In the same year, the group revenue exceeded NT\$8 billion (including inter-company sales).

Due to the fast growth of Acer, the public gradually became aware of our company and interested in Acer's management style such as a no punch-card system, employee stock ownership, the high autonomy of buyers in procurement, product innovations, etc. All these had become preferred subjects for the media. Many journalists were curious about how Acer motivated its employees to show up on time every morning and be dedicated to their work. How did Acer implement its delegation and prevent any cheating, etc. To all these questions, I only have one answer: "It all started from the first day."

In short, it all comes down to one principle: to cultivate the organization atmosphere. The most important thing is to establish a corporate culture and cultivate an atmosphere for delegation.

Cultivate Corporate Culture

- Straight thinking:** To establish a compelling and long-lasting corporate culture, a centralized and authoritative way of communication must be adopted.
- Reverse thinking:** A long-lasting corporate culture is built upon a management foundation of decentralization and authority delegation.
- Thinking logic:** Grant full delegation to executives at each level, allowing them to have their own way of interpreting the corporate culture and to implement it accordingly. That way, the culture will become vital instead of being a mere slogan or doctrine.

In Acer development history, the “318 incident” has played a significant role, and was named after the date of the incident.

On Sunday, March 18, 1984, Acer executives went to inspect a possible site near the Taipei suburbs as a location for a future company headquarters. Suddenly, the news came that some NT\$40 million worth of ICs were stolen from Acer’s Hsinchu factory (Acer’s total capital then was only NT\$90 million). Immediately we departed for the factory.

It was not the first time that an IC theft happened in Taiwan. The companies who experienced thefts often kept quiet for fear that, in releasing the news, banks would withdraw credit right away and suppliers would request payment. What was more bothersome was that the customs agency would demand duty payment (ICs were duty-free, bonded items, and the duty rate was 20% at that time). Acer, however, decided not to follow the crowd. The next day we conducted a press conference, explained in detail the entire incident and solicited help for any clues.

Rumors soon followed that Acer master-minded this episode with an intention to defraud the insurance company. Others said it was due to internal mismanagement, and that the theft was an inside job. Police started investigating some employees who had police records. However, I did not think it was the case. I determinedly underlined in the press conference: “I have full confidence that this incident is not committed by any of our staff. Acer’s philosophy of human nature is basically good will

not be altered by this incident.”

As we adopted an overt attitude, the incident even attracted the attention of the late President Yen of ROC and Mr. K.T. Lee, who was then the senior advisor to the President. Some legislators also initiated an urgent interrogation of the case in the Parliament sessions. Coast guard police not only blockaded fishing ports but airport customs also imposed stricter inspection.

With the assistance of various parties, the truth finally came to light one month later. About 85% of the ICs was retrieved, and it was proven that the burglary was not committed by any of Acer's staff. Our confidence in our employees was finally rewarded as their morale increased. Those employees with previous police records continued to achieve excellent performance on their jobs thereafter.

Most touching was that, while the case was still under investigation with rumors and gossip everywhere, I received many letters from our employees families. In those letters they expressed their full support and encouragement to me and to the company.

The feeling of distrust never occurred inside Acer even though we were confronted by dubious perception from among the general public. It is because since the beginning of Acer, the philosophy of “human nature is basically good” has been the cornerstone of our corporate culture.

It is not difficult to select one or two sonorous slogans and convert them into corporate culture. However, it is when a crisis like this strikes, the corporate culture embedded by the corporation on employee commitment can be fully tested with gratifying experience.

Laying Foundation While the Company Is Small

I often consider Acer's swift growth as a miracle. On the tangible side, we were able to raise the capital from our employees (employees had 100% shares for the first 7 years, and 70% when the stock went public in 1988). In terms of the intangibles, it can be attributed to the highly cohesive and congenial force among the employees that generated strength and close consolidation between the company and employees. This is again based on Acer's corporate culture.

Corporate culture, in general, consists of the shared value of a group. To generate effective corporate culture, the group needs to share the same

goals and visions, and should reach a consensus on principles and ways of executing a plan. In essence, corporate culture is not just slogans but is formed through practical implementation in daily life. Nonetheless, it requires slogans as the communication medium because effective communication helps in the formation of a consensus. Therefore, in general, consensus is more easily developed within a smaller group, and more difficult in a larger group.

Acer's extraordinary corporate culture today was formed back in the very beginning when there were only 11 employees.

Those early days are still vivid in my mind. I remember when our senior employees first came in for interviews, I would always tell them honestly that "Acer does not offer high pay, but the microprocessor business offers great potential. I cannot be certain if Acer will be around in the future, but I believe that as long as you are willing to work hard, even if Acer fails, you will be so equipped so as to be sought after elsewhere."

At that time, a college graduate entering Acer was paid only about US\$125 per month, which was way below the industry standard. But these young men were not discouraged. Their eyes shone with excitement whenever we talked about microprocessors because Acer was one of the very few companies in this advanced business.

The R&D staff, such as Fred Lin and K.Y. Lee, worked diligently day and night to produce samples and conduct testing with very limited resources. When screwdrivers were not enough, coins were used as replacements; when the pliers broke, their teeth were substitutes. Led by Ken Tai, the sales staff considered working overtime a routine. William Lu even slept in the office for a while. Max Wu and Simon Lin worked during the day and gave lectures at night in the training centers.

Therefore, punching a time card or signing an attendance book did not mean much to Acer, because, under a role model influence of their superiors, what the employees contributed to the company had far exceeded the time required of them.

This is Acer's employee-hiring philosophy. We believe that over promising only creates wrong expectations from the employee. As long as the Acer-trained employees match with the prospective needs of a society, we will be able to attract talents with the ambition to join Acer and can "suffer together through troubles" (willing to face challenges).

The formation of such a spirit had a profound influence on Acer's

subsequent development. In its third year, Acer became a forerunner in Taiwan in promoting an employee stock ownership program and bonus system. Prior to the implementation, I had an honest talk with the colleagues: "If you have a long-term commitment and confidence in the company's future, and are willing to share the risk, I invite all of you to make an investment in Acer. As to whether the returns can justify the investment, I would like you to make your own evaluation. I cannot guarantee that your investment will generate good returns."

The reason Acer's corporate culture can be well implemented is that during its development process, the results are often more significant than our initial expectations. Employees are therefore able to maintain high morale and cohesiveness.

Sharing a Vision

Most people have elevated hopes. However, when they find it difficult to realize these hopes, they easily give up. On the contrary, Acer's corporate culture stimulates our employees with greater ambitions to fully realize their hopes. The most important reason our employees are willing to remain with the company through the ups and downs together is our vision of "realizing the dragon dream." We anticipate that young people can find their partners here with the same goal and vision, and realize their ambitions together.

Many Acer employees gave up their original high-paying jobs with other foreign companies in Taiwan to join Acer, hoping to realize their ideals. Acer Computec Latin America vice president, Max Hung, left IBM to come to Acer and accepted a 40% cut in salary. When he took charge of the Latin American business in the late '80s, it was only a small peripheral market and his job was both demanding and challenging. After years of hard work, Acer finally defeated IBM and Compaq in Central and South America, and leaped forward as the top PC brand with the highest market share in that region.

Viewed from another perspective, such an ideal is a unique advantage of Taiwan companies. First, Taiwan people have been repressed politically for a long period. In that, besides making money, most people intend to pursue certain ideals of their own. Second, in Taiwan's social structure,

families are depended upon as the backbone of social development. For this reason, many people do not have to worry about their livelihood even if they are unemployed temporarily, unlike in U.S. where unemployment means having no one to rely on. Third, the Chinese still maintain the virtue of saving money which is rare in western societies, allowing flexible investment when opportunity knocks. As a result, when employees are inclined to experiment with their ideals by taking some risks, the company is also able to provide them opportunities to realize their dreams. The company and its employees have therefore established a win-win partnership.

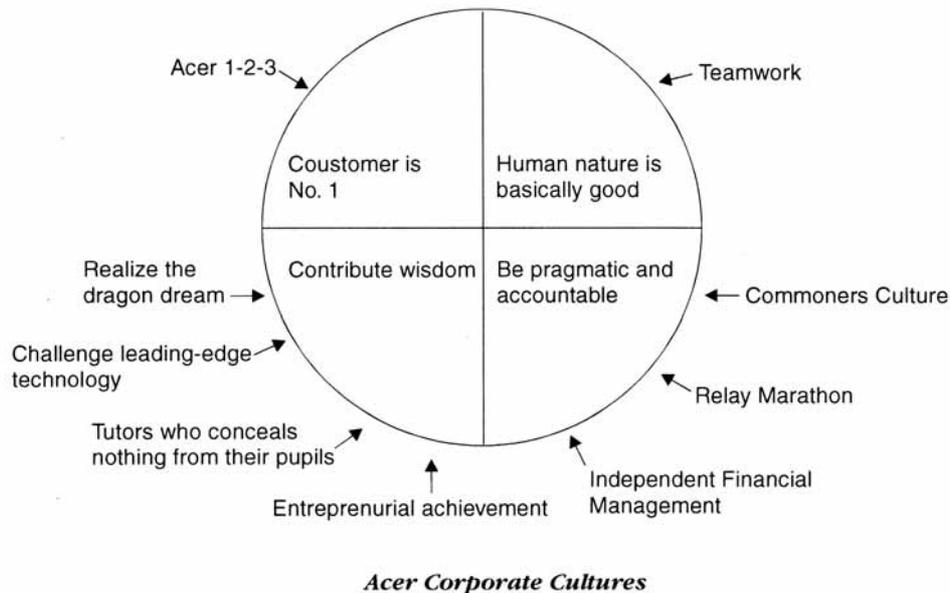
Acer's corporate culture is closely associated with Taiwan's culture as well as the Chinese conventional culture. For instance, in recognition for the Chinese entrepreneurship of "Rather be the head of a chicken than the tail of an ox," we promoted our proprietary slogan "The achievement of a little boss" and tried to generate a sense of achievement for employees by inviting them to take part in the employee stock program.

Another thing we tackled was the past custom of "concealing one hand" (holding back one's expertise, unwilling to educate others) and in that, a superior "has a card up his sleeve." We instilled the notion that "Acer tutors conceal nothing from their pupils," hoping that our executives would do their best to cultivate their subordinates and impart to them professional knowledge without reservations. Another notion is the "relay marathon" which aims to correct the past shortsighted practice of the Taiwanese enterprises.

As the company grows and employee headcount increases, communication is more difficult. Thus it has become a momentous job to reinforce communication and refresh the corporate culture on a timely basis.

Acer's corporate culture in the early days originated from the shared concept of the co-founders. Though there was a consensus on the culture, it was not well organized. At Acer's tenth anniversary, we invited the board of directors and VP-level executives to hold a "Renewal of Corporate Culture Seminar," and reviewed the "eight philosophies" advocated by Acer over the previous ten years. We also invited managers from mid-level and above to participate in the review meetings, and voted on the new Acer corporate culture with emphasis on four philosophies: "Human nature is basically good," "Be pragmatic and accountable,"

“Contribute wisdom,” and “Customers are the highest priority.”
(See illustration below)



Turning Slogans into Actions

I am proud to say that our corporate culture today does not occur by chance. Instead, it has been cultivated with effort. We worked hard and patiently utilized any chance we had to make an improvement.

In our experience, there are three hinges that are especially significant in developing corporate culture. First of all, the formation of corporate culture does not depend on any single person or on a few lectures. It depends on close interaction at every level of the corporation and the passing down of the corporate heritage. I believe that even a dominant executive can only inspire up to 100 people at most. If the company scale is more than 1000, it would need the influence of managers from different levels, top to bottom. Consequently, department heads understanding of the corporate culture becomes very important. With deeper comprehension and stronger consensus, the executive will be more

proficient in conducting daily communication, facing challenges, and leading his subordinates to assimilate the corporate culture even after office hours.

Second, corporate culture is not just talking, it requires practical implementation. For instance, in dealing with the concept of "tutors concealing nothing," all talk and no action will not produce any practical result. In the early days of Acer, employees referred to their superior as "shi-fu," literally meaning "teacher-father." Being called such a respectful and intimate title, executives had a hard time not to instruct their subordinates everything they know. In further expansion, we began to include this culture into the promotion system. The promotion of any executive depended on how many subordinates he had cultivated and whether he had groomed any competent successors to take over his post. Corporate culture can evolve and become strong this way.

Besides implementing in various systems, corporate culture must be part of the corporate decision making processes. There is a "commoners culture" at Acer (dubbed as the "poor young man's culture" in the early days but was later renamed as our employees did not like it). In any society, commoners outnumber the nobility. The competitors for Acer are the computer nobility from US and Japan. Therefore, in order to prevail in the competition, we need to unite and cooperate with commoners from all over the world. Our target is the commoners our customers, employees, and the investors. Otherwise, Acer will always fall behind the nobility in terms of background or financial resources. Thus, any of Acer's decision has to be in the spirit of a "commoners culture."

In 1995, Acer made a decision to develop a new product that would integrate computing and audio/visual home appliances. One project leader advised me that he was familiar with a group of experts who could manufacture high-end stereo systems worth millions of dollars. There was no doubt Acer could attract the fans and profit greatly from the product. I advised him that this was not Acer's spirit. Acer would not proceed towards the "elite" end of the market. However, if we could utilize the technology to produce high-quality stereo systems in volume and lower the cost for the general public, it would be worth our effort to research and develop. Later on, this department developed a video CD player that the public could afford and which met the ideals of a "commoners culture." If corporate culture cannot be implemented into corporate

policies, the company's development will gradually deviate from the spirit of the corporate culture, and the company will eventually become hypocritical.

Third, slogans relating to corporate culture must be adjusted based on the state of implementation. Acer had a slogan of "marathon spirit" in the early days, but our employees considered this an expression that implied a feeling of hopelessness to achieve a goal, and the pressure of not being able to take a rest did not meet with the standard of modern life. Hence, I revised it to "relay marathon," anticipating that our colleagues will "do their utmost on the job, complete their assignment sensibly while passing the baton to the next person in line, and train the successor so that our company's operations can be maintained on a long-term basis."

In other words, for corporate leaders to oversee the formation of a corporate culture, they cannot merely promote slogans without following up with further evaluation and understanding the interaction between the culture and the organization, as well as the changes in the overall environment. The success of a corporate culture depends on a keen sense to change and also the ability to flexibly adapt to the situation. Even though we have been very careful in cultivating our corporate culture, Acer once faced losing control of our corporate culture.

Regaining Our Corporate Culture

Around 1989, Acer entered a phase of rapid development and our corporate culture started to shake. One of the reasons is that the company's going public coincided with the skyrocketing of the Taiwan stock market. The sense of values changed in some employees' minds. Fast expansion of the company required many managers including some "parachute managers" (managers recruited from outside) who did not thoroughly understand Acer's corporate culture. Many top executives, including myself, made excessive commitments as we were in need of human resources. Many managers came to Acer without having the sense of "suffering together through troubles" but were seduced by the good benefits Acer offered.

The newly recruited executives and other new employees joined Acer with high expectations. Obviously we were unable to simultaneously fulfill the needs of so many people with high expectations. The situation got

worse because the company's performance was not as good as expected and the decision-making process became slow. Complaints were heard throughout the company and our momentum weakened.

For instance, some of the purchasing decisions were not as strict as before on the principle of quality and cost, but simply asked for the "best" items from the suppliers. Some employees were distracted from their own jobs as they were involved in the stock market and other investments. Gradually, the "commoners culture" had changed in its quality.

When I noticed that employee morale had started to fall apart as far as corporate culture was concerned, I took action immediately to recover the lost core value.

We immediately launched the "élite group plan" a long-term human resources development plan to cultivate 100 general managers within the Acer Group. The program was aimed to help top executives integrate themselves into the core value of the corporate culture, to embark on corporate re-engineering (see Chapter 6) and to announce the long-term goal of disintegration and delegation in order to regain the team spirit.

When the company was in difficulties, its operation became stagnant as well. Things seemed to move very slow resulting in employee turnover. Most of those who left did not have a long-term commitment to the company anyway, and our job was actually made easier while consolidating opinions among the great majority who stayed. Opportunities within the company again became sufficient and morale recovered gradually which produced a positive influence on our corporate culture.

After this painful experience, I would take every opportunity I have, either among employees or outsiders, to reiterate Acer's spirit of "suffering together through troubles." In fact, the company cannot afford to hire people who are unwilling to make a sacrifice for the corporation. If all people who come to Acer are willing to "suffer together through troubles," our job is already half done.

To re-build our corporate culture, we had all the intention to invite McKinsey & Co. to provide consulting service. They told me that if a company suffered setbacks in its development, numerous opinions would arise within the organization. Even though correct decisions were made, we still would not have the confidence to execute them. Generally

speaking, the time when a company faces challenges is the proper time to conduct an internal review. But excessive reviews often result in discovering more problems and hindering continued development. The company often ends up with more problems than solutions.

Fortunately, we have a large group of employees who still keep their confidence in long-term commitment to the company. They understand that it takes time to improve the company's structure, and are willing to wait patiently for the result to come. In fact, the reason that companies fail to solve their problems is because they lose patience during the process and easily give it up. Just think, a company like Acer still needs three years to make a visible improvement. For a large enterprise like IBM, it will take at least five to ten years to complete the whole process. It is impossible for any kind of re-engineering to show results within a short period of time, especially in re-building corporate culture which requires long-term efforts.

Unlike other enterprises in Taiwan, Acer's corporate culture faced the challenge of multinational management as the company gradually went global. To promote our corporate culture overseas, it must first resolve the language barrier. Foreign employees do not share the same origin and culture as those in the headquarters. What made it more difficult was that we expanded too fast overseas in those years and it became tougher to blend so many employees with diverse nationalities and cultural backgrounds in such a short time.

After years of re-engineering, our overseas operations have shown good results since 1993. Now, we can command a much stronger strength to promote our corporate culture overseas. We are taking the opportunity to establish a similar kind of corporate culture for the overseas affiliates that will retain Acer's characteristics.

This experience of Acer also explains one thing. When a company's operation shows performance, the corporate culture can be convincing. But if the business is not successful, it is still worthless no matter how excellent a corporate culture it may be.

Giving Vitality to the Corporate Culture

For many entrepreneurs, a forceful corporate culture means adopting a strong and unified way of communication. However, it is just the contrary

at Acer as the implementation of corporate culture is fully delegated. As long as it is within the four core concepts, any department head can come to a different interpretation based on his own personality, culture and language.

I often encourage each business unit to make their own interpretation and promote the corporate culture accordingly. During the last two to three years, I even asked our employees not to promote Acer's values using headquarters or old-time concepts. They were encouraged to give new meanings to the Acer spirit to suit the time and place of their environment.

People often ask me, with a decentralized and highly delegated organizational structure, isn't it in conflict with a unified corporate culture? My answer is, "Only by complete delegation can we make doctrines and slogans become living corporate spirit."

I think corporate culture is not the sole responsibility of the PR department. If a corporate culture becomes a propaganda and everyone can recite out loud, I think there is something wrong with this corporate culture. (Remember how many "rules" we have memorized since we were young, and how much we have actually implemented?) The spirit of a corporate culture may not change, but its adoption will mutate with the progression of time and environment. Someone must give it a most appropriate and correct interpretation.

Ten years after Tom Peters wrote the book *In Search of Excellence*, why are some of the outstanding corporations noted in the book no longer outstanding? It is because no matter how successful a corporate culture is, the presence of a strong leader is still necessary to maintain and provide guidance, it will fall apart gradually. Ultimately, when actions and slogans do not match up, the corporate culture will naturally disappear.

From this viewpoint, an empowered management system does not oppose the corporate culture. On the contrary, they have the function to give vitality to the corporate culture. There will always be areas that a forceful leader fails to cover, and there will come a time when the leader has to leave the company. But in a fully delegated enterprise, each executive thoroughly understands the corporate culture and is able to interpret it in his own way in order to keep the vitality of the corporate culture. A company without delegation is just echoing the views of the boss word by word, which cannot qualify as the "culture."

Therefore, to pass on from generation to generation, the corporate culture has to be built on the basis of delegation. To accomplish the task of delegation, the leader, of course, cannot conduct centralized management. How to get out of a centralized management and avoid the stereotype of a "one-man company" becomes another challenge for a business enterprise.

Breaking Through the Traditional Taiwan Family Business Mode

- Straight thinking:** A delegated management will cause the CEOs to lose control, which is too risky.
- Reverse thinking:** Delegation has risks, but no delegation has greater risks.
- Thinking logic:** Delegation gives the company a chance to survive even though it is risky. Without delegation, it is impossible to handle the heavy workload by one-self, and it will cause the company to fail.

In recent years, quite a few successful companies landed in trouble and asked help from the Taiwan government. Some of them hoped that Acer could take over their companies. I was willing to help, but after further understanding, I found that these companies routinely made no distinction between public and private interest. Their cash flow status was so complicated and hard to clear up, making it extra difficult for the government or any enterprise to help. These once successful companies could only go bankrupt and disappear.

It seems to me this is a replay of Qualitron, who was in financial difficulty. This is a common problem for Taiwan's small- to medium-sized companies where the boss works hard and does not want to create bad debts. Once he is unable to sustain the operation and no one is willing to take over, he has no other choice but to close down the company. Much of the company's intangible assets and social resources also disappear together with the company.

The core of the problem lies in the fact that many of these executives treat the company's resources as their own. They control all power and resources, and eventually step on the risky path of a "one-man company."

In fact, from a positive viewpoint, to pursue long-term development and dilute risks, a corporation has to accumulate human resources and capital. While the resources are limited, the corporation has to seek outside support. From a negative viewpoint, if the company runs into difficulty and hopes for someone to take over, it needs a clear financial structure even more.

Since the beginning, I have had the strong understanding that the company does not belong to me, finance- or management-wise. Based on such a belief, Acer firmly practices empowerment, and based on the delegation foundation over the years, we have successfully developed today's decentralized organizational structure.

When talking about a "one-man company," most people would acknowledge that such a kind of centralized structure is not a long-term strategy, and the company is less likely to grow and prosper. Though most executives do not want to become a "one-man company," unfortunately many companies still fall into this trap.

What is the reason?

Showing Tolerance and Appreciation for Your Subordinates

Objectively speaking, the boss is the one who usually controls the whole situation. He should be the most efficient person in dealing with anything, especially when a company runs into trouble. In order to solve the crisis immediately, the executive tends to make an overall decision. As time passes, it will inevitably fall into the stereotype of a "one-man company."

To avoid falling into this pattern, the boss first has to tolerate the fact that some subordinates are inferior to him in terms of capability. If the boss cannot stand his subordinates shortcomings such as making mistakes, lack of efficiency, and halfway through the work where the boss had to continue himself, the employee will lose confidence and never be able to work independently. In situations like these, management delegation is nothing but empty talk.

Next, the boss has to accept the different ways employees do things. Although employees may have various ways of accomplishing assignments, the result really depends on the judgment of different persons. The leader not only has to accept the result, but also has to learn to appreciate.

In fact, most executives know that it is impossible for them not to understand these concepts. But why is it that some enterprises which have developed into large- or medium-size companies or even going global still cannot avoid being a dictatorship management? It is because human beings have weaknesses and blind spots.

First, it is indeed not easy for bosses to watch from the sideline and not feel anxious. It is even more difficult to further ask them to appreciate others. Most seriously, some executives have no confidence at all in their employees. (I consider those with such personalities not qualified as leaders). If they are unable to yield their authority, they will have to attend to everything by themselves.

Next, they do not prepare far in advance and do not wait for the fruit patiently. When business goes well, business leaders do not think of cultivating helping hands, which are not needed. Once they find that help is needed, it's invariably too late to start the training. To have someone to depend on, we have to cultivate our employees when they are "not that needed" yet.

The secret is that it takes five to ten years to cultivate talents. If an executive is not prepared to make such long-term investments, or feels upset when few people leave the company, a vicious circle will appear facing lack of qualified human resources.

To investigate further, the reason that most executives hate to admit or hide in their inner heart is "greed." Greed takes different forms: power, interests, efficiency, convenience, shortcuts, etc. Because of greed, most executives take all the controlling power.

On the basis of human nature, most people who are educated and have certain social experience can distinguish right from wrong. To err is human, but it all stems from "greed." Everyone knows greed is not justified, but it brings immediate benefit. Therefore, one important way to overcome greed is to think of a logic to persuade oneself that eventually, being "not greedy" is more beneficial than being "greedy." More importantly, one has to think of a way to force oneself to put it into practice.

Not to Become a Long-Standing CEO

Since our agreement at the time of starting the Acer business together,

we decided that one day Acer is going to have another leader. It demonstrated the firm position that I did not have the intention to be the leader forever. This intent is not just talk. In 1989, Dr. Leonard Liu was hired as president of Acer Inc. and he was granted much greater power than mine, and I was wholehearted in giving up my power.

As I never agree with the concept of family business, I never have the idea of taking the company as my own. More than a decade ago, I had made the announcement that my children would not work for Acer. As such, I have to cultivate talents more aggressively within the company. Acer now has a strong management team of successors, which I believe can be attributed to the clear vision established that enables employees to generate loyalty and long-term contribution.

Some people think I like to set high goals. In fact, this is one way to force myself to take practical actions to avoid becoming a "one-man company." Once I make a commitment, I have to force myself to fulfill the commitment. To prevent myself from regretting, the best way is to repeat my commitment again and again to make the message firm and clear in my mind. In order not to break my promise, I have to try my best to implement my goals.

When the business began, we hoped to create a system that suits human nature and can continue to grow. Whether it is the theory of "human nature is basically good" or the "employee stock ownership" program, we have these in place to continuously strengthen the functioning of the system. When most employees become shareholders of the company, we have to establish an environment in order to protect the interests of the large number of employee shareholders. We cannot pass on interests privately or keep two different accounting books. The company needs to develop its business naturally in a healthy and systematic way.

Like many other Taiwan enterprises, Acer's finances were managed by my wife in the initial stage. Different from other companies, we did not intend to make Acer a family business. We had to do so because no other partners wanted to be in charge of finance. At the end of 1983, we invited Mr. Glyn Ing, the founder of Continental Engineering Corporation, to invest in Acer. Through the new investment, new capital was introduced and shareholdings diversified. Also, the responsibility of financial management was turned out through this opportunity.

As I think back, if we had not strongly expressed our desires to look for successors and to recruit more people, the fact that my wife and I worked at Acer together would inevitably give the impression that Acer was a family business.

There was no doubt about my wife's intention to contribute to the company, but we also had to consider whether her professional capability could catch up with the company's growth (In fact, I often ask myself the same question). As we do not want Acer to become a "one-man company," we then asked Mr. Ing, as an investor to Acer, to introduce a professional finance manager to assist Acer at that time.

However, the process of transferring the financial management responsibility was not so smooth as Acer was growing too fast and had a lot of intangible assets. Our structure was so diverse and complicated that it made financial management a tough job. The financial executive transferred from Mr. Ing's petrochemical business could not adapt to such a fast-changing business environment. But we did not give up the goal of managing our finances in a professional way. The finance management in the group companies finally became stable after the third finance executive was on board and Acer's decentralized client-server organization was installed.

At Acer, the job of a finance staff is not to watch over the company's pocket or make up for mistakes. Instead, they have to make financial management systematic under the condition of globalization and a fast-changing business. Especially for our overseas affiliates, the finance staff shoulders the responsibility to assist every president to maintain an effective financial system and a healthy corporate status. Hence, during Acer's difficulties in the early 0s, though some banks withdrew their credits, it did not cause too serious a financial crisis as Acer had adhered to these principles.

Complete Trust and Delegation

Many ideals and concepts are not possible to be carried out if they lack a systematic way of implementation. My philosophy in implementation is "playing with an open deck." While facing questions from outside, many enterprises would use ambiguous or empty remarks instead of giving a

firm answer. I believe that it does not have to be this way within Acer. In an open environment, many issues have become firm and employees do not have to guess the intention of their superiors, and they are able to march towards a common direction.

Of course, whether an enterprise can delegate or not depends on the willingness of its top executives. Sometimes the opinions of colleagues differ from mine. But as long as they are confident that their ways are feasible, it does not hurt to give them a chance. In fact, delegation to others will definitely generate differences with our own ideas. Figuring out this point, we can accept different methods and results without difficulties to replace the original measures in our minds.

In giving out assignments, I will only briefly express my comments and allow the employees to decide how they are going to proceed, as long as the result is acceptable. I always feel that the colleagues are doing a better job than I do, and therefore I become more than happy to delegate. As such, it not only saves effort on the part of a boss, if an employee achieves exceptional performance, the company also gets benefit in return due to delegation. It consequently forms a positive cycle in the delegation system.

I think that for most people, the sense of achievement generated in executing the assignment from the boss will be lower than a project of their own. After all, everyone anticipates an opportunity to demonstrate his or her capability and talents. When an opportunity becomes available, employees will naturally do their best.

Delegation does not mean no rules or no discipline. Delegation contains a very important spirit, i.e. responsibility. The head of each department has to be responsible for the decision he makes. Company executives can only provide support from the side but not make decisions for the department; otherwise, the department head will never learn and grow. Only when the company is operated based on a delegated and decentralized system will it become a company in good order and efficiency.

When Acer was in operational difficulties, we noticed that our employees did not have sufficient confidence and had developed the "big rice pot" state of mind. (Everyone had food to eat regardless of whether he worked hard or not). Our counter-measure was not to give up on

delegating, but to implement it even more thoroughly. We broke down the original organization to allow each company to operate independently. They were on their own to compete with other companies on the market and be responsible for their own operations. The situation was greatly improved once authority and responsibility were clearly separated.

Paying "Tuition" for Employees

During the course of establishing a system of delegation, executives will have to be willing to pay "tuition" for the growth of employees.

My personal experiences have been accumulated with the payment of a huge tuition (see chapters in Part II). Over the past few years, several of Acer's investments have lost hundreds of millions of dollars, but my management capability has been improved as a result. As long as the money we pay can generate returns for the company in the long run, it is considered an investment fee, not wasted money. To make Acer an organization with the capability to "think" and "learn," as long as mistakes are unintentional and the profit are more than the tuition paid, we have no reason not to pay tuition for employees.

Here is one example. When Acer introduced the Chinese Dragon computers, we received many favorable comments but not good sales. A new salesperson finally managed to sell one set of the dragon computers. He was very happy until he found out that the company was a fraud, and we lost hundreds of thousands of dollars on this deal.

His supervisor did not blame him. On the contrary, he said to the salesperson, "This case is very strange. Let's take a look at what's wrong here."

They went on to examine every procedure in the customer's credit management, and found out the sales person did ask for the company's bank account number and also checked with the bank. His only negligence was that he failed to inquire their transaction time. This was a part of our credit check procedures that had not been established.

The incident produced three implications. First, our credit management system has become more complete since then. Second, in appreciation of the supervisor's tolerance, the salesperson worked even harder, and later on received first honor in annual sales. Third, witnessed by other employees, the belief in our culture of "human nature is basically good" has become more convincing. Our returns have far exceeded the loss from that incident.

Seen from another angle, Acer is going to face so many unknown challenges in the future. If we are not willing to pay tuition for ourselves, who is going to pay for us and how can we break through the bottlenecks? Some people may question that with such a high employee turnover rate in Taiwan, the company's investment in human resources will eventually benefit other companies. The fact is, as long as the company provides a good learning environment, turnover will naturally go down. Moreover, if the company cannot treat its employees kindly, employees will leave anyway, and the company will still end up as a "one-man company."

I always think that there is no need for executives to question whether an employee is loyal to the company. They must only ask themselves how to create a conducive environment to make the employees stay and work hard for the company.

Strictly speaking, Acer and I are closely tied together, far closer than any other family business. I am also proud of founding Acer and continuing to lead our colleagues in facing challenges. However, I am prepared to leave, retire or turn over my leadership at any moment because I am convinced that we have nurtured so many talents. This is enough to make the turnover of power a pleasant experience and not a regret.

Now that Acer is everyone's company, one of my goals is to perform my function properly and to be a role model. I think my future successor is free to develop his personal style, but the spirit should not deviate too much. The successor has to work for the long-term operation of the company, and must be able to prevent any misunderstanding about the Acer spirit from the outside.

I never consider "control" as my specialty. I also do not believe that anyone can carry on the spirit of a company by "controlling" the company. But I wish to "influence" others by setting examples with my own behavior. Through gradual impact, I hope that the future successor will play an even more fitting role as a leader than I do.

Reverse Thinking to Break through Blind Spots

While I was sharing Acer's experience with my business friends, some would ask how to make a leader not greedy for power and willing to delegate? Does this capability come naturally or does it need to be developed? Well, I

think it is developed.

This applies to the formation of any concept. Once a blind spot appears, we have to think hard to fully understand it. If we do not think hard enough, we will end up half way and many things that are originally right from the start end up in failure.

For instance, if an executive does not delegate because the subordinate's efficiency is inferior, the thinking pattern only goes half way. He does not think about the issues such as long-term development and cultivating talents. He also does not think about the fact that he will be tired to death if has to do everything himself and that it will not improve the situation.

While making decisions, if corporate leaders not only consider the short-term, direct and tangible factors, but also include the long-term, indirect and intangible factors, they will be able to avoid many blind spots.

In fact, the process is not as complicated as it seems. A process of reverse thinking will be of great help.

For instance, the reluctance to delegate occurs when a corporate leader thinks that by losing control, everything will become a mess. With reverse thinking, his conclusion of "everything will become a mess" may not come true. If we think further, there are risks in delegating. But if we do not delegate, we will be too busy to take care of everything, and we will still fail. Delegating becomes, in this scenario, a chance for the company to work things out. Moreover, if the delegation is implemented in an appropriate way, the chance of being successful is greater than failure.

Once we think along this line, we will feel much more relieved.

Acer's delegation system is established and operated through a whole set of systems, which include a shared vision (dragon dream comes true), cohesive force (symbiotic common interest), corporate culture (human nature is basically good), and the extended long-term strategy (cultivate talents), as well as the system in strengthening the company's structure (transparent financial management).

If we need to sum up the total tuition paid within the last twenty years, I believe the "gain" is much more than the "loss." In the process of continuous learning and improvement, we have tried some strategies that will help the company grow on a long-term basis, such as the "client-server" organization structure or the "global-brand, local-touch"

concept. I believe these strategies will still work before the end of this century, as long as we are able to review and give them new meaning from time to time.

It is my sincere hope that, after going through so many challenges, our employees will be able to develop another effective operational model suitable for the 21st century. That will be another contribution to Taiwan and all the countries we operate in.

*Chapter 2***Comments by Stan Shih at Year 2004**

- Building corporate culture should start when the company scale is still small. As the environments change and the corporate-scale grows, corporate culture must be adjusted appropriately. The basic beliefs of a new corporate culture should be examined, based on the new vision, if the new culture is suitable for a new environment as well as for a new era. For example, while Acer conducting the second re-engineering; we realized we need new basic beliefs and core values. Waiting until the new business model operating smoothly, we invited sixty managements to discuss together and mapped out Acer's new basic beliefs: "service with honor; work with pride." The new corporate culture emphasizes profit, service, professional, effectiveness, and energetic. (Please refer to Chapter 9 "Cornerstone of a Sustainable Corporate" in "Millennium Transformation—Change Management of New Acer".)

- In the past, we emphasized empowerment to walk out the situation of "one-man decision company". Even now, I still think that a strong leadership may be positive to corporate development; however, while facing hardships, a corporate has to collect most broaden beneficial ideas and require all stakeholders working collaboratively. A corporate leader should continuously to hand-over the business to the successors to pursue a sustainable operation. Through full trust and complete empowerment in daily works, the young managers can progressively grow and success a bigger responsibility one day. Today, Acer and those companies derivate from Acer can consecutively expand, I can successfully hand-over my position, and the successors can do a better job than me; these all attribute to that I have insisted an empowerment management. It takes a long-term cultivation for a leader to enjoy the empowerment for a sustainable corporate. This cannot count on an inborn personality or character. I have been used to think reversibly. Unceasingly breakthrough the blind spots of thinking, I then can enjoy the genuine empowerment.

Chapter 3

A Lesson in Intellectual Property

Remember the electronic pen watch with a small LED panel on top to display time when pressed--The LED in the panel was later replaced with an LCD, which could display the time at any moment without pressing. The product was quite popular in Taiwan about ten years ago, but quite a few people did not have any idea that I was the inventor. They also did not know that the idea came from a failing product.

In 1975, I led an R&D team at Qualitron to develop the electronic watch. The watch was different from today's electronic watch in that it used an LED to display the time, not today's LCD. Users had to press the button with another hand in order to display the time and it was called "the double-hand watch." People in the watch business were not optimistic about the product and thought it would eventually be replaced by watches with LCD materials.

While the LED electronic watch was going nowhere, I went to Switzerland in April 1976 to attend a jewelry show (the Basel show.) At the show I saw a cigarette lighter with an electronic watch. An idea suddenly occurred to me: why not combine the watch with a pen? Since an LED display watch required two hands to operate, a pen watch which could be operated with one hand could eliminate such a problem. On the flight back to Taiwan, I quickly started a sketch for the product together with Mr. Vincent Lin, president of Qualitron. As soon as I came back to Taiwan, I immediately produced a sample in the Qualitron's mechanical workshop. About two to three months later, we introduced the world's first electronic pen watch.

After the successful launch of the product, I tried to apply for a patent, but it was not approved (I later discovered an interesting coincidence that the expert who evaluated the patent application happened to be my graduate school professor.) Soon after that, Taiwan was swamped with clones of this product. The unit price fell from US\$100 to only \$2 or \$3. Though profits slid considerably, the product was quite a hit anyway. The product was even used as gifts for overseas guests by the late Vice President Yen of the Republic of China on Taiwan.

Who would ever imagine that a failed electronic watch could open the door for a successful electronic pen watch? I always believe that along the road of innovation, there are numerous opportunities for trial and error. Those experiences often serve as an important asset for a company to cultivate their capability on a long-term basis. A product may fail, but as long as technological capability and intellectual property are accumulated, it will eventually bring along other good results in the future. Acer's development process has continuously proven this viewpoint.

R&D the Momentum Behind Innovation

- Straight thinking:** With proprietary technology, it is easier for a company to maintain competitiveness.
- Reverse thinking:** The release of proprietary technology to the public can ensure the long-term competitiveness of the company.
- Thinking logic:** The release of technology will help maximize the popularity of the product, which should permit the company to improve its economy of scale, reduce cost, and increase profits. Royalties can be re-invested in the development of new technology in order to maintain the company competitiveness.

R&D can be considered my original line of business. My first job was in R&D. At Acer, R&D has always served as the backbone of business. Developing new products has always been my interest since I was young. My designs, from desktop calculators at Unitron to the hand-held calculator, as well as the pen watch at Qualitron, were all firsts in Taiwan or even in the world. Those are the memories in my early career, which I shall always treasure.

Most worthy to mention is my successful experience in developing the hand-held calculator in 1972. During that period, Taiwan's calculator manufacturers had to depend on the U.S. for ICs and Japan for keyboards. Whenever there was a newer version of IC introduced, the number of keys had to be increased as well. At such moments, we had to wait for the Japanese manufacturers to develop the new keyboard which wasted a lot

of time. When I decided to develop a hand-held calculator, the first thing I did was to start from the key technology, and designed a small-sized keyboard of our own.

In order to look for a connecting metal with proper size and resilience between the keyboard and circuit board, I checked out almost every metal material store in Taipei, and finally found it in Japan. I was able to obtain a patent on this keyboard and made money for the company. More importantly, it reduced the development cost for calculators, shortened the time-to-market, and the industrial design became more flexible. When the calculator evolved from a simple model for arithmetic calculations to the more complicated engineering use, there were as many as 35 keys on the keyboard that were needed. The keyboard of my design was the only one in Asia that could easily meet the requirement of the 35-key keyboard, which allowed Qualitron to take a lead in introducing new products.

The experience also taught me a lesson. In developing new products, there are certain key technologies that will affect the length and result of the development process. As long as we are able to break through the bottleneck present in crucial technologies, we will be able to maintain and enhance our R&D capability continuously.

On the other hand, from my personal viewpoint, the technology involved in my product was not so sophisticated. However, converting a simple idea into a profitable commercial product is much more complicated and more important than the R&D work itself. For instance, the first calculator I developed in 1971 failed to receive further improvement, and therefore, it lost the opportunity to become a profitable product.

Pure creativity alone does not guarantee successful products. We have to continuously learn from the failures and improve the product so that the product can be widely received by the market. The efforts and resources invested in R&D will provide returns someday.

Acer Sells Anything

There are a lot of inventors in Taiwan. No matter what their inventions are, most inventors treat their creative output as priceless treasures to have and to hold, which eventually are either defeated by

competition or cause some inventors mental disorder. To me, the invention of technology is endless. A good invention of today can easily be surpassed tomorrow by much better inventions. The most important issue that an inventor must face is how to trade his invention for tangible rewards; that is, to commercialize the invention. An inventor should consider whether there is enough cash to commercialize the invention for mass production. Even if there is enough capital, does he have the capability to effectively market the product and manage the finances? Usually, not many inventors are capable of handling such series of challenges.

Therefore, I think an inventor should commit to creativity and get rewarded for his wisdom by licensing the invention to others for production and marketing rather than getting personally involved in the process. Inventors may do well in the invention department, but they can fail all together if they try to be inventors and businessmen at the same time. Crossing over to the business side from invention often kills the inventor's creativity and wears them down. Through licensing their invention, their profits can be re-invested to make more inventions and more money. Maybe someday, when the inventor thinks he has earned enough cash and feels capable of learning about mass production and marketing, he can then proceed to make money from the process of commercialization. By then, the operating risk will be reduced accordingly.

Acer started out its business in a similar way. In the beginning of our business, we assisted other manufacturers in more than 40 product development projects. What we did here not only helped us accumulate capital but also cultivated the R&D capability no inferior than any other large home appliance manufacturers in Taiwan. Even today, though Acer's scales have exceeded that of other Taiwan home appliance and electronics manufacturers, we still advocate the principle that "except for our family members, Acer sells anything," which of course includes technology and patents.

Sharing Good Things with Good Friends

There is one Chinese TV commercial slogan: "Sharing good things with your good friends." In normal thinking, sharing means you are not to

enjoy the entire profit alone. To enjoy the profit alone means also to take the risk alone. In a similar sense, sharing profits means sharing and reducing risk. Moreover, a company will not depend on the success of one single product to guarantee no future concerns; rather, it requires a series of continuous successes in order to guarantee its existence. In fact, sharing the invention is not to lose one's own interest but the creation of a greater benefit.

For instance, many global companies enjoy possessing proprietary technology, especially the Japanese companies, as it guarantees no rivals in the market for a huge profit. But Acer does not follow that idea. In the high-tech industry, today's unique technology may become tomorrow's cliché? We might as well share the technology with others when it is still worthwhile. The advantage is that, on one hand, we can re-invest the royalty income in other new research efforts to make sure the technology is continuously improved. On the other hand, when making the patents available to others, the product will become more popular and more companies will participate in manufacturing the product. We can therefore reduce the cost through maximization of production volume and maintain the company's competitiveness at the same time.

From another viewpoint, the possession of proprietary technology is dangerous. Many companies hold on to their proprietary technology simply because their operating cost is too high and they believe that this is the only way to generate sufficient profits to cover the cost. This approach in reality hides potential problems and delays the timing for any correction as needed. Moreover, the company will surely encounter adverse feelings from others especially if the company places pressures upon other companies or its customers with its technological advantage. It is impossible for the company not to make any mistakes. Once it does, or its technology is no longer a winner, the resistance from others will become even more forceful. As a result, it will bring even greater operating risks to the company.

Based on such concept, Acer not only opens our technology to others but also maintains an open attitude to external technologies. Although Acer started with selling R&D results in early days and has since owned quite a few technologies, our early representative products were all cooperative results with or acquired from others. Examples include the

“Chinese Dragon Computer” developed jointly with Mr. Chu, Pang-Fu, the software for the Microprocessor I that was purchased from Mr. Chen, Yi-Chun (former president of Twinhead), and the development of the first-generation IBM PC/XT compatible computer which was commissioned to Industrial Technology Research Institute (ITRI).

“Microprocessor I” a Big Hit

Acer’s product milestone in the initial stage was none other than the “Microprocessor I.” It was not only a starting point for the export of Acer brand name products, it also paved the way for our development of personal computers.

A hand-held computer learning kit was the product I desired to make on my first day with Acer. Before then, the size of a computer-learning machine was usually quite bulky. I had one belief that just as the calculating ruler eventually was replaced by the hand-held calculators, the bulky computer-learning machine would soon be replaced by a hand-held one. It would make the product more widely received.

In the mid 90s, due to size, all-important components were unable to fit the compact requirement of “light, thin, short, and small.” Acer’s financial limitation at that time could not support the long-term investment in R&D and commercialization. I had no choice but to set aside the idea for the time being and to engage first in the distribution of the U.S. microprocessor-related products. In 1978, Acer distributed Pan Asia’s “EDU-80” microprocessor learning machine based on the Z80 processor. Pan Asia was the only producer of this learning machine in Taiwan at that time. Acer and Pan Asia then formed a microprocessor-training center in order to promote the machine.

The product was introduced overseas in 1980. To meet the requirement of the overseas market, the technical document (manuals) of EDU-80 had to be translated from Chinese to English. I then asked professor Wei (my classmate) of Chiao-Tung University to do the job. For mature electronic products (such as TV), the manuals are very simple with a few pages introducing the various functions of buttons. But, for computer products with complicated software programs and hardware structure, manuals are usually a thick volume. Writing a technical document is even more energy consuming than the hardware

development. Writing non-Chinese technical documents by Taiwan manufacturers is a task with even more difficulties.

It took half a year to finish the English documents for the EDU-80. But the investment also helped with the introduction of "Microprocessor I" as its English technical document was revised from the EDU-80's. The development of this product only took two months. We chose the timing of electronics exhibitions in Taipei, Japan and U.S. to launch the product, which quickly became a big hit in the international market.

Technical Documents Ensure Success

The reason that Acer was able to rise quickly from the PC industry in the early days did not depend only on our product offerings. Our efforts and resources spent on technical documentation also far exceeded those of our competitors.

Even so, Acer's early documents still left something to be desired. In 1986, Olympia, under the AEG group in Germany, was looking for an OEM manufacturer. NCR was our competitor on this deal. Although NCR's manufacturing was done in Germany, their prices were higher and their product quality was poor. Regardless of these, the customer finally still chose NCR. The key for them was the technical documentation. For customers, good documents provided by OEM manufacturers could help them to provide effective services to their end-users.

This incident reinforced my commitment to strengthening our capability in technical documentation. In 1982, I invited Alfred Lee, then a journalist of the China Economic News Service "an English newspaper of the United Daily News" to join Acer and to take charge of the technical documentation department. He also established the Taiwan branch of the Society for Technical Communications (STC.) To produce accurate English documents, besides hiring Americans in Taiwan, we also recruited about 10 engineers from the Philippines for this function (Acer hired the largest number of legal Filipino workers at that time in Taiwan.)

Due to long-term investment, Acer has been the leading company in Taiwan in terms of technical documentation. Besides English, we are now capable of producing documents in Spanish, German, French and Italian languages. This has definitely helped our business development in the

Latin American and European markets.

For Taiwan PC manufacturers, having quality technical documents not only impacts the success of products in the international market, it is also where the bottlenecks are. Acer's achievement in committing to this work again testifies to our operating philosophy of "challenging difficulties, breaking through bottlenecks, and creating value."

Cultivating Capability and Grasping Opportunity

In recent years, the upgrade of industry has become the most paramount task in Taiwan, and R&D happens to be the key subject. According to the survey, the R&D budget for most private Taiwan companies is less than 1% of their total revenue, much less than Japan and the U.S. With such low investment, the speed of transformation within the industry naturally slows down.

Compared with the cost of marketing, inventory and operation, the cost of R&D is relatively small. In this respect, Acer is always aggressive in terms of R&D investment.

In my experience, it is not difficult for companies to make investment in R&D. The most difficult part in R&D is how to evaluate and distinguish products with market potential and have them commercialized. These tasks are more important than the technology itself. Every R&D project is a system which encompasses many intangible factors such as quality, operation cost, volume manufacturability, etc. We call this the "enable ability" of a technology. It is not to be learned from the textbook but is to be acquired through practical implementations.

When companies possess such capabilities, there are still two strategic conditions that must be fulfilled: direction and timing; that is, determining the direction of R&D, and the best timing as well as the environment to initiate. Both conditions require guidance from professionals with accumulated experiences.

Unfortunately, most R&D engineers are relatively junior because seasoned engineers are often promoted to management ranks. Also, senior engineers often are not willing to conduct basic research for a long time. As a result, the turnover rate is relatively high among R&D engineers. Hence, the passing down of experience becomes very important. One can always document how to do certain things; but after all, it is not based on

personal experience and the benefit is limited. I believe that the best solution is to give our engineers a chance to try for themselves while giving them suggestions and guidance when needed.

Acer puts much emphasis on cultivating the R&D capability. As for the various R&D projects, we emphasize the accumulation of experience and technology during the process instead of the final results. Failures often may be attributed to insufficient experience or immature technological standards in the overall environment. But if we are able to continuously accumulate capabilities, we will be able to turn our know-how into profitable products when the overall environment becomes mature.

From a long-term perspective, the accumulation of R&D strength is much more important than the success of a single project.

In 1984, Acer rolled out its first 16-bit personal computer. We were investing in the Suntek company in Silicon Valley (under our own Multiventure Investment Inc.), to utilize their existing know-how. We sent a team of 6 engineers to the U.S. to transfer the technology and to proceed with the development of a 32-bit workstation. But the project finally failed. We learned that technology of workstations is more high-end than PCs. Two years later the same team was sent to the U.S. again, this time for the development of 32-bit computers. In 1986, Acer successfully introduced the 32-bit computer ahead of IBM.

In 1991, Acer made a huge investment to develop the RISC PC which utilized MIPS microprocessors as the CPU. The product was launched in 1993; however, it turned out to be a failure in the market as the supporting software was not readily available. By the end of 1995, we re-assembled our technology and utilized Intel's Pentium chip to introduce a new generation of high-performance, low-cost servers.

For many years, Acer has focused on innovation and encountered numerous setbacks. I always feel that in any R&D project, although the product may fail, the accumulation of technology will last. Especially when the global market is overwhelmed with the protection of intellectual property rights, the R&D capability further serves as the lifeline for companies in the market competition.

Challenges to Intellectual Property Rights (IPR)

- Straight thinking:** Violating the IPR of other companies, in order to prevent or reduce loss, one will adopt defensive or evading measure.
- Reverse thinking:** One heart will ache when paying a reasonable reparations, but this will help prevent a greater loss in the future.
- Thinking logic:** Paying reparations can alert oneself. Accumulating own IPRs can cross-license with other manufacturers and protect own interests.

As a member of the global IT industry, we always consider IPR to be one of the most important subjects we have to deal with.

In the initial stage of Acer, although we heard about the concept of patent and copyright, they remained all vague ideas to most manufacturers in Taiwan. Because of my personality, as long as we discovered our product design similar in some way to others, we would withdraw our original designs. Hence, Acer has not been entangled in any intellectual property cases although we have had many R&D projects since our start-up.

Acer's first challenge to IPR was the Microprocessor II introduced in 1982 for home use. The design of Microprocessor II was based on a concept similar to Apple II, but with completely different outlooks and circuit design (Taiwan's contemporary products were at that time all 100% imitations of Apple II.) Acer spent a lot of effort not only in reducing its size, but also in simplifying the design and structure. Moreover, Microprocessor II and the Apple II were not compatible.

Acer never had the idea of copying Apple II. Our Microprocessor II became a sensation in the international market due to its competitive price and unique design. It was not only selected by Germany's CHIP computer magazine as one of the annual Ten Outstanding Computer Products, it also went on the cover of UK's Your Computer magazine together with our national flag. The overwhelming positive responses immediately aroused Apple's serious attention and they started to block this product on a worldwide basis.

Apple even sued Acer distributors in the countries such as the UK and South Africa. We wanted to fight to the end as we believed justice would be on our side, but after learning that the legal fees involved in these

countries was not something a young company like Acer could afford, we decided to stop the sales of this product in all other parts of the world except Asia.

Apple did not stop right there. They engaged the Lee and Li law firm in Taiwan to further impede Acer's sales activities. As we believed our position was strong in terms of the facts, legal position, and litigation expenditures, we continued the sales of Microprocessor II in Taiwan until the introduction of Microprocessor III (an Apple IIe-compatible machine).

IPR Pioneer in Taiwan

However, misfortunes never come singly. During this time, one whole shipment of Microprocessor II computers was seized by San Francisco customs. The overall situation then was very negative to us as Time magazine had just released a massive report on Taiwan as a "pirate kingdom" and the whole island was rife with Apple II counterfeits. Even so, it had been my belief that the counterfeiting problem was not existent with the Microprocessor II. We then engaged a famous U.S. law firm to represent Acer so that we could embark on the business in the U.S. market as early as possible.

Even though our lawyer continued to negotiate with U.S. customs, the problem still could not be solved. We finally figured out the key to the problem was not the product itself, but the complimentary user's manual that went with the product.

When the Microprocessor II was launched in Taiwan, Acer introduced a small cartoon book on how to use the computer in order to raise the interest level. The easy-to-understand Chinese version, written by a university professor, received very good responses from end-users. In view of its popularity, we then asked the professor to revise it into an English version. It turned out that a portion of the document was copied from Apple's manuals, resulting in this IPR violation incident.

Strictly speaking, it was not easy to judge from the product itself whether it violated any IPR issues, but this little manual made us lose our grounds. Finally the whole shipment of computers was seized by U.S. customs without any return.

At that time, there was not any mature definition on the scope of computer software copyright in the international market, and a large gray

area were still existing. In Taiwan, the government massively banned the production and sale of electronic arcade game machines. This act drove a lot of manufacturers to convert their production to the Apple II counterfeit. After experiencing the painful lesson, Acer deeply realized the importance of IPR. We took the initiative to invite three professional lawyers from the U.S. to conduct a seminar on IPR. Participants included related business partners, officials of the Bureau of Industry, professors, and assistants to the legislators. IP-related concepts such as trademarks, patents, copyright and trade secrets were first brought into the country, which sparked the interest in Taiwan to pursue further related studies on IPR.

Since 1983, Acer has entered the phase of developing the IPR in a systematic way. Before then, there were other corporations with legal staff. However, Acer was the first company in Taiwan to specialize on the IP issue and expended huge resources on the research of this subject.

Intangible Property Becoming Important

As we look back, if the “clean room” approach had been available prior to the introduction of Microprocessor II, Acer would not have lost a whole shipment of computers at the U.S. customs.

“Clean room” is a way to prevent copyright violation of computer software in developing software for compatible computers. In IP's four categories, patent is defined to protect the concept of an invention, and copyright is to protect the way the creation is expressed. Designing software for compatible computers resembles someone writing a book with a plot similar to the “Adventure of Robinson Crusoe.” As long as the writer never read the book before his own creation and was able to develop a story with similar complicated plots, he did not infringe on the copyright of the author. Clean room operation is very much similar to this concept.

For instance, designing software for IBM-compatible computers requires two teams. The first one is to study an IBM computer and write down the specs, while the second team has to declare to the court that they have never read the original IBM BIOS (Basic Input/Output System) software. They can then design the software according to the study results of the first team. Software developed this way will be compatible with

IBM computers while without infringing IBM's copyright.

This method started to gain acceptance in the U.S. during the mid 90s. A year later, Acer implemented a clean room concept introduced by a law firm in Chicago.

I have been much enlightened by the Microprocessor II incident to draw a conclusion here. A human being's economic activities in the past basically centered around the creation of tangible properties such as farm products or real estates. In the future, people will create more and more intangible properties. While the trading of tangible properties has been going on for thousands of years, disputes continue to exist in all areas today, such as in real estate sales property inheritance, or stock trade. People dealing with the tangibles can understand, at best, only half of the related regulations; not to mention the new area of intangible property rights, which is so new and there will be for sure many problems associated with it.

In order to call to the attention of our colleagues and business associates on IPR, I always give this metaphor: For all the wars that have taken place in human history, most of them have been fought for tangible property such as land or an oil field. The fiercest wars in the future, however, will be wars relating to intangible IPR. It won't take long before that era comes. At present, we can already detect this trend from the newly aroused trade wars.

To Reverse the Copyright Laws in the Legislature

As the IPR concept is still in its budding stage, the progress has been very slow. For the past ten years, especially under the pressure of the Special Section 301 from the U.S. government, Taiwan has achieved considerable improvement compared to the earlier situation where piracy was taken for granted. During my term as chairman of the Taipei Computers Association (TCA), we made a great effort to push for the passing of the computer software copyright laws through the legislative body. It has had a profound impact on the IPR development in Taiwan's IT industry.

In 1985, Taiwan's Interior Ministry proposed the Copyright Law under the pressure of a trade sanction from the U.S. government. The law

was immediately approved during its first-round review in the Legislature. When we discovered that the law concerning computer software was written in a general term buried in the regulations governing copyrights for music and creative writings, etc., we decided to take remedial actions as the increasingly complicated disputes on software copyright were bound to go beyond the scope defined by a few simple words.

A task force was organized in TCA and it included company representatives from IBM Taiwan, Mitac, attorneys from Li & Lee law firm, and professors of the National Taiwan University. The task force conducted studies on the IPR acts newly implemented in countries such as Japan, the U.S. and Germany, and proposed a new version of software copyright. There were only a few regulations in the proposal, but it clearly explained the background and reasoning of each regulation with a detailed study report as an attachment. Our purpose was to reverse the version passed during the first review in the legislature.

Meanwhile, it was unprecedented in Taiwan's legislature to reverse an act that had already been passed in the first review. Our proposal for a reversal would have an overall impact on Taiwan. What we wanted was to establish clear and fair game rules on copyright, unlike some political "interest groups" who sought nothing but personal gains. We were able to convince some legislators who promised to help with our proposal. We also gave each member in the legislature a copy of our proposal. Through several public hearings, our version of the copyright law was passed intact by the legislators.

Soon after that, TCA began to promote the importance of adhering to the copyright law through a series of related programs on anti-piracy and IPR concepts to every walk of life even down to the elementary schools. It is our hope that by extensive promotion and education, we can make these concepts deeply rooted in Taiwan.

Acer's frustration in IPR was far from over at this time. There were more difficulties as we formally engaged in the development of compatible PCs.

Acer's involvement in compatible PCs dated back to my participation in the Comdex show in 1982. The product that caught the spotlight during that show was the IBM-compatible PC introduced by Compaq. Digital Equipment, Texas Instruments, Wang's Lab and Hewlett-Packard all had introduced PC products at the same time, but they were not

compatible with IBM's. Although the functions and appearance of their machines were not anywhere inferior to that of IBM, the sale did not attract much attention at all.

This brought me much enlightenment that the compatibility of computers is very important. Our Microprocessor II with power functions was a big hit, but it was not compatible with the Apple II.

Many applications software written for an Apple II could not run on the Microprocessor II. Thus the sale was limited. Hence, if computer manufacturers do not intend to counterfeit, they need to have the capability of developing compatible computers.

Full Speed on Developing Compatible Computers

After returning to Taiwan, I started to promote the development of an IBM XT-compatible product. As Acer's manpower at that time had all engaged in developing the Apple IIe-compatible Microprocessor III, we therefore commissioned the task to ITRI in Taiwan with the cost of NT\$15 million. Along the development process, we intended to make a better product by adopting a newer version of IC and the best IO system. However, the product turned out to be incompatible. Customers in the U.S. did not accept our products, which then had to be returned for revision (here we had a much improved compatible product, yet we needed to follow exactly the original one that was much more inferior.)

At the end of 1983, as we were about to launch the product, the Bureau of Industry requested that ITRI not to license the technology solely to Acer, but share it with other manufacturers. We indeed had a sole license contract with ITRI, but the Bureau of Industry negotiated with us and we finally reached the agreement to make the technology available to five manufacturers. The commission fee was lowered to NT\$3 million. As such, Taiwan's PC industry was formally developed with Acer leading the pack followed by other manufacturers.

As a Chinese saying goes, "It is always difficult in the start." In February 1984, Acer's first PC shipment was detained again by the U.S. customs. The problem this time was the BIOS designed by ITRI infringed IBM's copyright. As ITRI is a government agency, we were able to negotiate with IBM to return the shipment to Taiwan for modification.

It was like the same experience we had with the Microprocessor II.

ITRI did not have any intention of counterfeiting. What it did not have was simply the implementation of a "clean room" concept. There may be a small part in the entire compatible PC that happens to be similar to that of the original one; thus considered a violation of IPR.

Since we had already received orders for the returned PCs, the BIOS had to be fixed as soon as possible. As the ITRI required six months to make the revision and we could not wait that long, we took the alternative of spending NT\$30 million to license the Concurrent CPM from Digital Research Inc. (DRI) of the U.S. CPM was the previous Microcomputer standard before IBM's adoption of MS-DOS on PC and its function was more powerful than Microsoft's MS-DOS. Unfortunately, DRI's profile was so high that IBM decided to turn to Microsoft for its operating system. DRI's business gradually declined.

After acquiring the license from DRI at a high cost, Acer was able to make its delivery on time. What Acer had paid so far enabled the early entry of our PC products in the international market. Although Acer has suffered a lot due to the incompatibility of its product, it is the first manufacturer in Taiwan to realize the importance of compatibility and focus its strength on developing compatible computers.

The reason that the Chinese dragon computer has failed is simply due to the lack of applications software. In 1982, the R&D team led by Jonney Shih developed the idea of using standard hardware and software platforms of an English computer, under which a Chinese computer could be developed and run. We could then utilize the average English software to process the Chinese characters.

At that time, other Chinese computer manufacturers such as Wang, IBM, HP and Mitac, all utilized special specs to process the Chinese characters, which was totally different from the English standard that was universal. They all suffered great setbacks. Acer's initiation of the concept of "transparency" has thus become the worldwide standard for Chinese computers.

In the worldwide PC history, the Japanese PC industry is the only exception that does not adopt the "transparency" concept. Their proprietary specs of a computer ensures its manufacturers' protection in the local market from foreign competition, but they fail to expand their computer business in the international market. They may be able to

control the Japanese market, but they will lose the global one.

Today, we know the concept is not difficult to understand; but it required some personal experience to understand its importance and implication in those early days.

Lengthy Negotiation on Technology License

Ever since IBM-compatible PCs became the industry trend, IT players have been constantly dealing with IBM regarding IPR issues. Taiwan manufacturers have had many experiences in this regard.

In 1987, IBM started to license its technology to manufacturers of compatible computers in Taiwan. The signing of the licensing agreement itself was not controversial, but the content of the agreement was often one-sided. The scope of the licensing was very narrow (license only up to 16-bit computers) and IBM could terminate the agreement at any time on its own. Therefore, many manufacturers could not accept the terms and refused to sign the agreement.

IBM Taiwan's legal executives adopted the strategy of "allying with small manufacturers to force the large ones to comply." IBM signed the agreement first with small manufacturers and trading exporters, and utilized the strategy that these small manufacturers could advertise an "authorized by IBM" mark to beat the larger ones. IBM then used the pretext that since many manufacturers had signed the agreement, there was no reason for the rest not to sign.

Frankly, the reason that many small manufacturers obliged was partly because they did not study the contract in details, and partly because they had the attitude that to sign was one thing, but to implement was another. Naturally, such an attitude would not be acceptable and recognized by those companies like Acer with long-term planning. Cooperating with five other companies, we went into the details for each article in the agreement with our American lawyers and started a lengthy negotiation with IBM which lasted for more than one year.

The reason we hired American lawyers was to obtain the viewpoint of American businesses and to learn about their acceptable resolutions. Even to the very end of the negotiation, there was still one article in disagreement. IBM insisted that as long as they considered there was a fact of infringement, they could terminate the licensing immediately. For

us, the fair and reasonable way to resolve any dispute should be the determination of the court on any infringement rather than IBM's single opinion. IBM's reasons for insisting on their position is that it was already applied in Japan and that Taiwan needed a harsher rule as this island was notorious for counterfeiting.

Finally, Mr. K.T. Lee, senior presidential adviser, and Messrs. Chen and Hsu, the Minister and Vice Minister of the Ministry of Economics, all expressed their concerns on this matter. Eventually IBM agreed in its letter issued to the Ministry of Economics that a lead-time would be given between serving a notification and enforcing a penalty. If the issue was not resolved during that time period, formal legal actions would be taken; but IBM would seek the blessings first from the Ministry of Economics. It was not until this time that both sides agreed on the licensing issues.

During this negotiation which lasted for more than one year, the tremendous pressures from the forceful rival and unknown future is beyond our description.

A Lesson with a Price Tag of US\$9 Million

On May 12, 1989, shortly after the agreement was reached, IBM informed us that Acer again infringed IBM's copyright. It was a bolt from the blue and we just couldn't believe it! When the evidence was presented to us, it was confirmed that the problem was in the keyboard driver portion of the BIOS.

Alvin Tong, then the executive vice president of Acer, was sent to Japan to negotiate with IBM. We were planning to pay the penalty as this part had very little impact on the overall product. We estimated a reasonable penalty would be around US\$2 million. But IBM representatives asked for \$30 million as penalty based on their calculation! I can still remember the pale look on Alvin's face when he returned to Taiwan. It was totally out of our expectation that IBM would ask for such a large amount.

For average companies facing such a situation, most would probably seek political channels for resolution. But Acer decided to solve the problem on our own and negotiated with IBM on a long-term basis.

But until November 1990, while we were in the middle of "Acer's Renaissance" meeting, I was told that some products on the market were

still not revised. Upon hearing this, my firm attitude changed immediately. If IBM found out about this, they would definitely ask for a higher penalty or even terminate the technology license all together, which would cause the suspension of our business. After discussing the situation with Leonard Liu, then Acer's president who came from IBM, we decided to compromise and eventually the case was closed with a payment to IBM for \$9 million.

Acer's profit that year was only about half of the US\$9 million, which we had to pay IBM. The huge loss occurred during Acer's toughest moment, but we had no other alternatives except facing the fact.

Concurrently, another minor incident occurred in Acer TWP Corp. In 1989, Acer TWP published a book about understanding IBM BIOS. The book was written by a professor, who included a portion of the IBM BIOS manual as an attachment. It was caught by IBM, who demanded US\$25,000 as a penalty. Since this was indeed a violation, we made the payment without any argument. With such high "tuition" we have paid to date, we hope it will teach all employees an important lesson to remember that we must be prudent and cautious in the future concerning IPR.

Fully Dedicated to Developing Patents

Acer can be considered the top company in Taiwan in terms of the lessons learned and tuition paid relating to IPR issues. Acer has implemented a series of policies concerning the management system of IPR following the "enlightening" experiences, ahead of any other company in Taiwan. As early as 1982, Acer started to establish regulations for the management of IPR.

The regulations were divided into two parts: the first part is protective measures, and the second part is on the development strategy.

Since 1985, rules regarding IPR were made part of the employee hiring agreement, which included trade secrets, ownership of IPRs, and so on. In the beginning of the implementation, some employees were reluctant to sign the agreement. I had face-to-face communications with them and made revisions based on their inputs. A few employees, however, still refused to cooperate. Their reason was that there were no precedents in Taiwan. Since we believe that this system protects the benefits of the

majority of employees and should not be given up due to the boycott of a few, an ultimatum was given that whoever did not sign would regretfully have to resign. Finally, all employees signed the agreement. To date, an IPR conflict never occurred between the company and the employees.

On the other hand, we had a system in place to encourage our employees in developing IPR, and also assist them in applying for registration. Over the years, the number of Acer's patents have already exceeded the total sum of other IT companies in Taiwan, and the quality is also getting higher as well. The early patents are mostly for industrial designs, while the newer ones are mainly inventions.

Acer was never skimpy in rewarding our employees on IPR achievements. We also set up a patent evaluation team to review the achievement of employees. The reward system is divided into several levels: first, a research report on the patent of others is rewarded with cash; second, a new patent idea is also rewarded with a cash prize; third, once the idea is approved by the internal evaluation committee, the legal staff will help with the documentation of the idea and apply for a patent; fourth, when a patent is granted, the company will give different levels of rewards depending on the type of the patent, etc.; and fifth, when the patent is licensed with royalties generated for the company, the inventor will receive a bonus.

In the recent two years, there have been other companies in Taiwan who modeled their system after ours, but we have the most stable foundation in terms of how extensive and complete our program has been.

Under our policy to encourage effort on IPR, Acer has been honored with the highest honor, Taiwan's first National Invention award. As part of the rule that the winning corporations cannot enter the same competition within three years, Acer waited and proudly took the first prize again three years later. It proves that Acer's R&D capability in Taiwan has been the foremost. Not only in Taiwan, Acer has struck cross-license agreements with several U.S. high-tech companies as our patents possess both "quality" and "quantity."

Of course we will not feel satisfied on this basis. There is still much room for us to improve compared to the first-class companies in the world. I also believe that for Taiwan's high-tech industry to move further, there must be a broader and more profound capability in developing patents.

I would not hesitate to say that today, Acer can maintain an equal

technology position with many global IT companies. Our employees have good knowledge of IPR's importance and are fully dedicated to the development of patents. All these have not been accomplished without paying a high price.

The ChipUp Incident

In 1992, Acer's ChipUp technology (replacing only the CPU to upgrade the computer and to greatly accelerate the operating speed) was granted a patent and Acer started to collect royalties from those manufacturers who had utilized the technology in their products. However, the manufacturers refused to pay the royalty and used the excuse that the ChipUp technology was a "prior art" and a simple one.

Viewing from a different angle, we cannot claim that the ordinary objects that are easily manufactured today, such as the paperclips, were not innovative in its original idea. The prerequisite for a patent is "innovation." When Acer raised the "ChipUp" concept, no other companies in the world had raised the same idea before. The ChipUp technology was not only granted a patent in Taiwan but also in the United States.

Many manufacturers who refused to pay the royalties claimed that Acer's royalty collection would force the whole industry to move out of Taiwan. Besides business associates, press media also sided sympathetically with the seemingly weak group. Some semiconductor companies, with a view to pleasing their customers, also opposed Acer. While asking for reasonable royalties in return for our technology innovation on ChipUp, Acer ended up becoming the target for public attack on this matter.

If Acer was to follow the practice of American companies, we would directly resort to legal procedures and force these companies to pay as we had all the evidence required. But Acer did not do it that way. In fact, there were other Acer patents that were at times infringed upon, but we never took any legal actions against them.

In 1987, Acer discovered a large quantity of Acer-TWP software counterfeits on the market. With police assistance, we were able to track down 38 companies in Taipei, Taichung and Kaohsiung producing the counterfeited software. Our way of dealing with this was to ask for only US\$200 from each company and request them to issue a guarantee letter,

promising that they would never do it again, or they would be charged accordingly. Our reason to take a low-key approach was that we understood under the concurrent environment, not many people in Taiwan knew much about IPR. We would like to sacrifice some of our benefits in order to educate the public and promote the IPR concept in Taiwan.

The ChipUp incident happened at the same time when Compaq started the price war and the market was in a fierce competition. Understanding that all PC manufacturers in Taiwan were undergoing a transformational process, we took the initiative to hold a briefing seminar in the Taipei Computer Association (TCA) for all related companies and explained to them about the patent scope. Frankly speaking, international corporations would not spend so much effort in a situation like this. They would simply send out formal letters requesting royalties and would not care about how much money and resources each company had to spend on studying the patent scope.

We have also offered many discount programs as alternatives for using our patent, but everything was refused. Finally we have decided that once Acer obtains the ChipUp patent in the States or any charges brought forth to Taiwan's Central Standard Bureau are overruled, Acer will start collecting the royalties.

In 1994, Zeny Corp. in the U.S. brought charges against Acer in the Taiwan court that ChipUp had infringed its IPR, but the case was overruled. Acer then initiated the royalty collection again according to the agreement provided for them earlier but still they refused.

Compared to the measures adopted by some international corporations, Acer has made too many concessions but still cannot have constructive feedback. We recognize that as a member of the computer industry, we have to face the reality and tolerate that the environment is still not mature and most manufacturers still do not have sufficient knowledge and understanding of IPR as a whole.

Paying a Price to Protect our Future

During the ChipUp incident, some manufacturers decided that due to Acer's past suffering in IPR, we took the same measures to oppose other manufacturers. This conception is not true. In today's business world, IPR has become a worldwide trend in the high-tech industry. Also, there are

numerous manufacturers who are aggressively engaged in researching and protecting IPR. If business leaders do not recognize the importance of IPR, are trying to get by, and are unwilling to pay the price, they will be penalized by the companies who claim infringement on their IPR sooner or later. It is like a "time-bomb" waiting to explode. When that happens, those companies will not be able to make any concessions to violators as Acer does and will make it very hard for the violators to exist.

I once attended a seminar on IPR hosted by Taiwan's Institute of Information Industry (III). Looking around, I found no high-level executives in attendance but only some lower-level personnel. I could not but express my regret towards this situation. Intellectual property rights have a great impact on the decision and development of a company, which require decision-makers to further understand its concept and implication. Acer has indeed suffered losses in this regard in the past, but we have also accumulated experience and capability during the process. These should ensure us not make the same or any big mistakes in the future.

From the Intel 338 incident in 1993, you can easily discover the difference between Acer and other companies. Intel, quoting its U.S. Patent No. 338, accused Taiwan's Twinhead Computers of using AMD CPUs which infringed Intel's patent. In compensation, Intel asked Twinhead to either switch to Intel CPUs or to pay 1% of its sales price as royalties. This was originally a patent dispute between Intel and other CPU manufacturers, but Taiwan manufacturers, as the buyers, could not escape from the accusation.

This case had a great impact on Taiwan's PC manufacturers. They were furious and anxious about this matter, and turned to the government for help. However, we were not too worried about the impact on Acer. After years of building up a strong foundation, we have entered into a cross-licensing agreement with Intel, which includes the ChipUp technology. Even if Intel quoting the No. 338 patent as a weapon against the Taiwan companies, it would not necessarily put Acer in a difficult situation. This is an advantage of our long-term focus on investment in IPR.

However, this does not mean that Acer already has sufficient patents and that we need not worry anymore. For Acer's DRAM joint venture with Texas Instruments (TI), we have allowed TI to provide all the intellectual technology required so as to avoid any IPR issues.

From a different point of view, the prosperity that Taiwan semiconductor manufacturers enjoy today is partially attributed to the royalties they have not paid to foreign companies. Some Taiwan manufacturers are generating profits on the brink of violating other's IPR. But how long can the peacetime last? Those foreign manufacturers may overlook such issues due to the small size of Taiwan companies in the past. However, as Taiwan gradually develops into the world's fourth largest semiconductor producer, it is hardly possible for those foreign manufacturers not to continue ignoring such an issue.

As a matter of fact, foreign manufacturers have come to claim royalties one after another. Some manufacturers are still unwilling to pay, which obviously shows that their viewpoints are different from Acer's. Whoever is right or wrong, I believe that the answer will be evident in the next ten years.

To deal with IPR issues, a company should not evade or resist when a crisis arises. Instead, it should reserve and cultivate the related capability during the time when there are no such issues. The most important task on IPR is the cultivation of talents to put in a "bank."

While the company size is still small, we can rely on external professionals to perform related functions. Once the company has grown to a certain size, it has to establish a professional team internally to cope with any possible needs. It has been a tough process for Acer as there were no professional IPR lawyers available in earlier years. Today, we see abundant human resources now either in government or in the private sector that concentrate on IPR.

As a hindsight, Acer embarked on global operations much earlier than any other Taiwan companies. While most Taiwan enterprises still make business decisions based on limited domestic considerations, Acer has been forced to play in the major league according to international game rules. We have been always ahead of the pack and it is inevitable that we have to spend more time and effort than others in our endeavor. This is true not only in IPR, but as well as in other areas. When we began producing worldwide advertising campaign, none of Taiwan's advertising companies had any experience along that line. The same situation is also true in finance and accounting, as no other companies had experience in consolidating its worldwide financial reports with Taiwan as its headquarters. All these service companies were steps behind Acer's needs

during our initial stage.

Similarly, Acer has also encountered numerous challenges in its attempt to be a pioneer of Taiwan companies in developing brand name products for the world market.

*Chapter 3***Comments by Stan Shih at Year 2004**

- According to Stan's Smiling Curve, the research/development innovation in the intellectual properties (IP) portion is the key of future industrial and corporate competitiveness, in the knowledge-based economics. The IP development should be based on the market need; otherwise it will be un-marketable technologies which are the mistakes many entrepreneurs and IP owners often make. In the new economy, creating a new business model is also a kind of an IP development. Again, it has to be profitable to be sustainable; if not, it will be just self-indulgence. Acer has set up Acer Value Lab to master the market need and develop the technologies and products, from the viewpoints of the users. (Please refer to Chapter 7 "The Smiling Curve for a New Century" in "Millennium Transformation—Change Management of New Acer".)

- IP disputes are fate of high-tech industries. Especially in those advanced countries, IP dispute has become a business competition means. Taiwan cannot escape the challenges. Every enterprise should avoid the disputes in advance and hire the lawyers to fully understand related IP laws to ensure that will not transfer a potential IP-violation technology. Once there is an IP dispute, an enterprise should consider taking care of both business and regulation, and letting the professionals draft an acceptable resolution to both dispute sides.

Chapter 4

Breaking the MIT (Made in Taiwan) Stereotype

The year 1995 was one of bountiful harvest for Acer's image worldwide. Besides topping other companies in terms of brand name awareness, Acer was championed as the "New Asian Giant" by Business Week in November 1995 as "remaining entrepreneurial." In an annual survey on "Asia's Leading Companies" conducted by the Far Eastern Economic Review, Acer replaced Formosa Plastic for the first time as the No. 1 company in Taiwan. With all the shining records that Acer has established, I also have been fortunate to receive the "CEO of the Year" award presented jointly by ING Bank, International Media Partners, and other international organizations.

Back in 1981, when Acer started promoting the Microprocessor Learning Kit in the international market, we received a reply from a Singapore importer who said, "Taiwan is not the place for computer production and I am not interested." It was at this time under an all-negative and inferior image of the company, Acer ventured out its first step to globalization.

In recent years, I was often invited to speak about Acer's experience in creating corporate image and brand name products, since these two are so closely intertwined with a company's marketing strength. It so happens that marketing is traditionally the weakest aspect for Taiwanese companies.

It is widely acknowledged that Taiwan is a world leader in manufacturing, which in my estimate, can be rated about 70-95 points on a 100-point scale. R&D capability is about 30-70 points. But marketing strength is only about 5-30 points. Without effective marketing, mass-produced goods can only compete in the market place with reduced selling price. This is why Taiwan-made products cannot afford an image of inferior quality. There exists such a stereotype that the MIT (made in Taiwan) products are often reduced by 30%. I often have the suspicion that the image of a healthy company is worse than an American company

in Silicon Valley, which is about to go under.

Therefore, to build marketing strength, a company has to improve corporate image and its brand name. A company is much like a person; the brand plays a major part in a company's survival. How a company operates depends largely on the kind of image a company projects.

Corporate Identity and Image

- Straight thinking:** Due to the poor image of MIT products, one can only compete by reducing price.
- Reverse thinking:** Due to the poor image of MIT products, competing by price reduction leads to a dead-end.
- Thinking logic:** The possibility of making an investment to improve the image is slim if there is no room for any margin.

In 1988, Acer launched an initial penetration into the Japanese market. This was at a time when the Japanese were beginning to feel threatened by the products of newly industrialized countries entering into its own market. Acer's entry received massive publicity from the news media, which provided Acer with many free advertising opportunities. The publicity ranged from the NHK to many newspapers and magazines, totaling roughly 40 million copies.

At that time, the price war in the personal computer industry had not yet taken place, but the perception of MIT computer products in the international market was a low-price competition. Japanese reporters questioned with much suspicion, "How is Acer going to price its products?" They were expecting that Acer would take a low-price strategy and that they could then blast about the low prices being associated with low quality. But much to their surprise, Acer's price positioning was the same as the Japanese's high-pricing strategy.

Our reason behind this strategy in the Japanese market was simple. We did not want our technology and innovation to be stereotyped as "cheap price, poor quality."

This strategy was adopted after considerable analysis and deliberation

on our part. Under the Japanese's protective state of mind, there was little room for Acer to develop its market in Japan. Moreover, even if there were Japanese consumers willing to purchase our products, we did not have the capability to do the after-sales service. Hence it required a long-term consideration and planning. Although Acer's current market share in Japan is relatively small, we have been able to maintain a steady growth pattern. This is simply because Acer was able to create a strong image from the beginning.

What is an image? I think image is something that reaches people ahead of the facts. It is much simpler to understand and identify with than the facts. No matter an image is about a company or a product, it is easier to adjust from high-end to low-end position than vice versa. Considering that the overall Taiwanese position at that time was already perceived in an inferior state, it would have been even more difficult to turn the situation around if Acer had positioned its products in the Japanese market at the low-end.

Building an Image through Innovation

In establishing Acer's corporate image, our focus has been on "innovation." We have always believed that leading technology and innovative products are the best tools to upgrade our brand name image. The way to manage an image is to create a high-end position on a long-term basis first, and then to increase brand name awareness.

Simply talking about acquiring a strong image for a company is not going to make that company's image any better. The first challenge in establishing a corporate image, therefore, is to cultivate the capability of making the company to be worthy of its name.

In its early years, Acer spent about five percent of its total revenues on R&D and continued to create an innovative image through leading technology and products. In 1986, Acer introduced a 32-bit personal computer ahead of IBM. Four years later, two items of computer technologies that belonged to the 32-bit computer were licensed to Unisys. In 1992, Acer was the first to integrate computer and consumer electronics technology and came up with the multimedia Acer PAC PC, which offered computing, communication, education, entertainment and audio/visual features. Soon after that, the Acer Formula that functions

much like a workstation with a PC price, was introduced using the 64-bit RISC PC based on the MIPS CPU with Microsoft Windows NT. Most recently, Acer Aspire multimedia home PC was introduced in September 1995 and has since become a star product in Acer's current product line.

The best timing for a company to create an innovative image is when a powerful technology or product is released. The Acer PAC was rated as the "Product to Watch" by Fortune magazine, while the Acer Formula was praised by Far Eastern Economic Review and Business Week respectively, with reports like "An Ace Up Asian Sleeve" and "Up from Clone and then Some."

Among all the innovations, Aspire stands out as an important opportunity to further uplift Acer's image. Extolled by CNN as "Redefining the Home PC," the Acer Aspire home PC quickly attracted the attention of international media with its creative housing design and superb features. CNN and other TV networks, Wall Street Journal, Reuters, and UPI have all reported on this new Acer achievement. The Acer Aspire PC has helped Acer to rid itself of the "30% off" MIT stereotype and shortened the price gap with Compaq to only 3%.

Poor Man Marketing and Promotion

Over the years, Acer has put in more effort in uplifting its corporate image than what it appears in budget. I call this effort "poor man's marketing," which is also a testimony to Acer's "poor young man's culture." Simply speaking, we are utilizing the strategy that our corporate image can be enhanced through word of mouth, much like "opinion rules the PC world."

With Acer's resources, it is impossible to invest a great sum of money like Coca-Cola to produce brainwashing style of advertisements. Acer's strategy is to continuously ride on newly reported events to create publicity and convey the same spirit. We adopt a gradual but persuasive approach to create a consistent corporate image. In the U.S. market, Acer has to be more aggressive in its advertising budget in order to compete with the dynamic ads of other computer giants. In Japan and other third world countries, the news coverage about Acer appears more often. We have received just as much publicity in these countries as we have at home in Taiwan. Sometimes media effect of this type is even greater than advertising placement.

From the viewpoint of news worthiness, it is impossible to expect the media to constantly deliver the same message for any company. What they need is “fresh” news. Therefore, to create corporate image, we have to consistently deliver interesting and newsworthy press releases that repeatedly reflect the same image. For instance, Acer attracted the media's attention in its early days through technological innovations. In the recent two years, Acer's management innovation has become a new focus of interest for the media. If we cannot continuously introduce new concepts or ideas on innovation, the media would lose interest in reporting on Acer, and we will be left behind by the public.

Corporate image needs appropriate positioning which must comply with corporate goals. Commitment and capability to reach the goals are also necessary. It cannot be achieved by temporary news exposure or packaging. Promotion for short-term purposes not only brings limited results but also creates negative impact.

For short-term purposes such as an IPO or sales campaign, companies often conduct excessive promotion to the media. If any inconsistent messages should appear later, it will dilute the image created earlier or even hurt credibility among the media and general public.

Building an Image through “Local Touch”

Building an image generally requires a long-term strategy. Creating a corporate image in the international market requires even more detailed strategic thinking. There are two experiences that Acer can share.

In 1986, Acer introduced the 386 computer ahead of IBM and broke the perception that Acer was an IBM follower. The media and academia in the third world countries were especially enthusiastic about this achievement made by a company, like Acer, in a developing country such as Taiwan.

On the other hand, while Acer developed the world's first ChipUp™ technology in 1991, I made a trip to New York to announce this technological breakthrough to the U.S. media including Wall Street Journal and Business Week. We did not receive much enthusiastic responses from the public. The prime reason was that this was not an American achievement, hence its importance was greatly reduced. With

the same levels of technological innovation, an American company receives much more recognition than a non-American company.

Similar examples are prevalent. This is why Acer decided to revise its strategy and adopted the "global brand, local touch" strategy.

At first thought, it seems that "local touch" does not have much to do with image build-up; but in fact, it is an important strategy to mitigate the stereotypes low quality surrounding the MIT products. In developed countries, as Acer adopts localized strategy and goes public in the local market, local people have no excuse to be critical about Acer products. To localize in developing countries, the local partners are allowed to own the majority of the company. Holding an international brand, Acer does not follow the norm of economic invasions of most multinational companies. This makes the local consumers more willing to accept Acer as a trusted friend.

This innovative management model has brought Acer once more into the limelight of international media. World Executive Digest has labeled this strategy as "The Fourth Way" of globalization, aside from the American, European and Japanese globalization approach. Harvard University listed Acer as an outstanding case in globalization. Japan Computing complimented that Acer "rewrites the textbook for tomorrow's computer industry." Due to the numerous recognition from the media, Time magazine and Asian Week commented that "Acer is the No. 1 company" and "the most admired high-tech company in Asia," respectively.

In order to effectively break the stereotypes about MIT products, Acer has tried its best to develop a series of strategies, and we are glad that these efforts are finally paying dividends.

Breaking the Stereotype of MIT products

Based on my experience, the establishment of intangible assets and image is relatively an easy task and does not require large expenditure as long as the effort is geared towards a definite direction. However, it is regrettable that very few people in Taiwan can get the knack and be willing to dedicate themselves to such a task.

In 1995, one of Gallop's surveys revealed that the ranking of Taiwanese products fell behind Mainland China. This unfavorable result

brought up joint protests from both government and private sector in Taiwan. To put this in perspective, it is a fact that we cannot deny. Taiwan does have good products: the caps used in Los Angeles Olympics were made in Taiwan, and one out of every three computers in the world is from Taiwan. Many professional magazines also give high recommendations to Taiwanese products. However these high praises are not well known to the public. On the contrary, the blown-off made-in-Taiwan umbrella which was used in the movie Fatal Attraction sent a message to the world.

What affects the product image is not only the product itself. Environmental issues such as the rhinoceros horn have prompted international environmental protection groups to boycott Taiwan's products as well.

All the unfavorable images about Taiwan did not simply occur overnight. These negative images of "Made in Taiwan" have accumulated over a long period. It has been reinforced through repeated happenings until it finally became a stereotypical impression for Taiwanese products. Therefore, the poor image of Taiwan is an accumulative result of over several decades and cannot be reversed in a short time.

The reasons for Taiwan's long-standing negative image are twofold. First, many poor-quality products are sold under Taiwan brands, while those same fine-quality products are manufactured for foreign brands (OEM). Second, although there are good Taiwan-made products, there is not enough promotion or marketing of them. Though the government has begun to place advertisements on international media in recent years, the effect is still limited. In fact, as we read more carefully about the propaganda of government policies, it will not be difficult to find that the message conveyed is hard to accept. It demonstrates that the communication capabilities of the government still leaves much to be desired.

To upgrade the image of Taiwanese companies, we have to start with rebuilding the country's image. The first thing to do is to give Taiwan a new positioning. In 1989, during my speech at the Presidential Palace in Taiwan, I mentioned the concept of "High-Tech Island and Global Citizen," which was intended to find an appropriate positioning for Taiwan. The focus of High-Tech Island is not only on developing the high-technology industry, but also on increasing the added value of

traditional industries, improving quality of life, and establishing the transportation and telecommunications infrastructure.

The current "Regional Operational Center" project promoted in Taiwan contains six centers, which I think, are too complicated for outsiders to understand. There has to be a guiding center for major positioning before the rest can be implemented. In my opinion, the most appropriate center to play such a role should be the high-tech manufacturing and R&D center.

This is not because I am from the high-tech industry. In fact, the foundation that Taiwan's high-tech industry has established over the years has earned the country higher recognition than industries such as finance or transportation. Moreover, advances in technology have an uplifting influence on other industries and can demonstrate that Taiwan is moving towards a positive image of high quality.

If we concentrate our resources on building up such an image, it will also help uplift the country's image as a whole. This is just like an individual who possesses certain strengths that can help project a good image for the individual as a whole.

Ever since I proposed the concept of "High-Tech Island" for Taiwan, international publications such as Fortune and Business Week have also given detailed reports on this concept. If the government and general public would continue the discussion of the proposed concept, explain and even implement the proposal, the media would also contribute by reporting on the subject. Thus, the concept could improve the positioning of our country. It will be very beneficial to Taiwan as a whole.

No Nationality for a Brand Name

Of course, there is stillroom for every industry in Taiwan to put forth their effort. With better packaging and better marketing communications, Taiwanese products still have the opportunity to break through the current image.

A trend worth noticing in today's business world is that trade marks have gradually broken through national boundaries. Just as Sony promotes the "Made in Sony" image, Acer is also promoting the concept of "Made in Acer" in more than 30 countries around the world (the difference between the two is that Acer's overseas business is owned in

majority by local shareholders and the local operation has a higher degree of autonomy). Therefore, an enterprise begins to have the opportunity of changing the stereotype imposed by showing the origin of manufacturers.

Given the current MIT image, if a Taiwan-made product can become a famous global brand with its manufacturing sites all over the world, it can help reduce the negative impact brought upon by the Taiwan-made image in the short term. From a long-term perspective, it will help change the international image of Taiwan as a whole.

We had thought deeply about this problem before Acer started globalization. In the third year of our operation, we once considered moving the Acer headquarters to Silicon Valley. However, considering that the image would have to be built up through continuous corporate activities and that most of Acer's decisions and policies were made in Taiwan, moving the headquarters to Silicon Valley would not solve the problem. One Taiwanese company, ARC (American Research Company), utilized the strategy of setting up its headquarters in Silicon Valley and operating out of Taiwan. The strategy brought them much benefit in the early days of their operation.

Acer utilized the same concept but implemented it in a different way. In the beginning, we did not particularly emphasize the image of Made-in-Taiwan for our products. Having achieved satisfactory product performance, we began to create a global operation network and impart to the media the notion that a Taiwanese company achieving such performance is nowhere inferior to the European or American companies. As that we deserve positive recognition from the media and the public. Today, the image of being a Taiwanese company has sometimes become an advantage for Acer.

In general, the overall image for Taiwan is still more negative than positive. Due to this case, we do not want to promote Acer products everywhere with the MIT trademark. It is my hope that there will be more Taiwanese companies joining together to become the model for third world countries. This will generate a great benefit to the MIT image. Japanese products used to have poor image in the past. However, through the joint efforts of numerous Japanese companies, they have made the Japanese products indispensable in people's daily lives around the world. Their products deliver the pervasive message of innovation and quality. The image of Japanese products has now completely changed.

Investing to Increase 1% of Added-Value

I have always wanted to upgrade the Made-in-Taiwan image and I believe that increasing the added value of MIT products can help the country achieve the goal. Taiwan's total annual export revenue amounts to US\$100 billion. If we are able to increase at least 1% of the added value for a product, an additional \$1 billion revenue can be generated. To implement this plan, 0.1% of the export revenues can be allocated to promote Taiwanese products. I believe that a small investment like this will be worthwhile as it can transform intangible image into tangible reward. When Acer encountered difficulties in the past, we were able to receive the support from banks and employees, and quickly recover to generate even more revenues due to the image that Acer had established over years.

Obviously, there is a sure chance for Taiwan to raise this add-value by 1%. However, the annual budget for the government's Five-year Image Enhance Program is only 0.01% of the total export revenue, and even less than one tenth of Acer's annual advertisement budget. Without sufficient effort, the effect is expected to be limited. Under such circumstances, how can we expect to improve the image of Taiwanese products?

It has been mentioned previously that by breaking through bottlenecks we can create value. Now I believe everyone has discovered where the bottleneck is and agreed that breaking through the bottleneck of poor MIT image can create more value. But are we willing to do it? Do we have the long-term dedication and effective means? Many people think we do not have the capability to break through the bottleneck of poor image. Maybe it is true for the time being. However, capability can be cultivated. It just depends on whether we have the dedication to cultivate the capability.

Business executives often discuss the reasons of why they are unwilling to invest in building up an image. The prime reasons such as lack of capability or fear of losing money seem sensible. But how can we be capable if we do not make an effort to invest in this area? If both government and businesses do not make an effort to invest, who else is capable of breaking through a bottleneck like this?

I always believe that in any society, people who have more resources should make more sacrifices and contribute more to the causes accordingly.

As we all know, both government and businesses are the ones with more resources. But what happens today is that those with more resources are the ones that crave for more. This is evident in the fact that certain bills, which impact the re-distribution of power or benefit, are often boycotted by specific interest groups in the legislative process.

No matter it is the government or the businesses, both will receive good results as long as they adhere to the ideals of their direction. For 20 years now, while Acer has paid expensive prices in our endeavor, we also have received a fair share in return. With Acer's increasing brand name awareness in the international market, it has proven that our efforts in image promotion has borne tangible results.

Brand Name and OEM Business

- Straight thinking:** Creating a brand name business is difficult. A company should not create a brand name business until it has reached sufficient size and capability.
- Reverse thinking:** It better for a company to create its brand name business when it is still small.
- Thinking logic:** Taking on the difficult task first to cultivate corporate capability will help the company to grow more smoothly in future. Otherwise, when the company gets larger it will be restricted by too many concerns and will hesitate to take on the risk.

In recent years, it has become popular for companies to establish the corporate identity system (CIS). In 1987, when Acer was the first in Taiwan to change its brand name from Multitech to Acer, most people, including Acer's own employees, did not appreciate such decision. They questioned why we had to abandon a brand name worth US\$20 million.

There was a little story about the old Multitech brand name. In 1981, Acer launched the Microprocessor Learning Kit and received a very good review around the world. The German computer magazine, CHIP, wrote an article about this product, but mistakenly wrote Multitech as Microtec, which was the name of a scanner manufacturer. As a result, a large

quantity of sample orders went to Microtec.

There are numerous IT companies around the world with company names ending in "--tech." As our original name was not unique and resembled other names, we were not allowed to register in some countries or to make investments in building this brand name. Therefore, when Acer wanted to go full speed on our globalization of operation, we had to consider changing our brand name.

During that time, some Chinese people persuaded me, "Didn't our ancestors teach us not to change our names easily?" I told them that many great people in ancient China changed their ungraceful names once they had passed the government examination to be government officers. Based on this practice, a corporation that has different goals and missions in the course of a long-term development should be free to change an inappropriate name for even up to three or four times in its history.

While promoting brand name business in the international market, many executives have encountered the same dilemma as Acer. They are usually torn between reluctance, unwillingness, and hesitancy to make the decision in changing the name. I always advise them that the future is more important than the present. In the late '80s, Acer needed a new brand name which would be available for use, to be registered worldwide so that we could invest in advertising and attract the audience even for just a moment. Under this situation, it is obvious that the benefit of having a new brand name for the sake of future needs far outweighed the present value of holding on to the Multitech name.

Under such a concept, the name "Acer" was chosen in 1987 among thousands of possibilities. The word "Acer" has Latin origin which means "aggressive" and "energetic." Its pronunciation is sonorous and brings no negative connotation. Moreover, it implies the meaning of "ace." The biggest benefit of all, Acer is normally listed on top in an alphabetical order among companies in a brochure or a pamphlet. Therefore even a casual glance can land Acer in the reader's eyes.

Until today, many large companies still insist on using phonetical translation from the Chinese as their English brand name. In my opinion, the Chinese brand name is for the communication with the Chinese, while English is for English speaking people. There is no reason in making the two connected. A name, after all, is for ease of communication. For instance, my English name is Stan, which I believe, is easier to remember

than my Chinese name "Chen-Jung," particularly for those who don't speak Chinese. I believe those who have traveled to Mainland China are often confused by the long strings of direct English translation from the Chinese pronunciation. The adverse effect is often reduced if we intend to enter the international market this way.

According to the evaluation of a U.S. brand assessment company in early 1994, the value of the "Acer" brand has amounted to US\$180 million, making the Acer brand with the highest value in Taiwan. At present, I believe that the value has already increased.

Equal Emphasis on OEM and Brand Name Business

Creating a brand name business has always been my goal. We had the plan of creating a brand name business when Acer was first established. However it did not come true until Acer reaches its fifth year of operation. Many people think that the brand name business is a "privilege" of large companies. In my opinion, the success of a brand name business has nothing to do with the size of a company. Multinational companies, such as Microsoft and Apple, all started their brand name business even when they operated in their garages. Hence, if a company is interested in building a brand name business, better start when the company is still small.

For Taiwanese companies, the brand name business helps the company grow better and transform in later days compared to the OEM business.

First, usually the OEM orders are mass-produced with standard specs, while brand name business has less quantity with more diversified specs. Hence, if the company scale is not big enough, it will be difficult for them to secure large OEM orders. On the other hand, starting from small orders to large orders better fits with a corporate growth trend. If companies start with large orders and then ends up having small orders for normal operation, problems such as idle human resources and machines will occur.

Second, once the OEM manufacturer starts the brand name business, it is competing directly with its customers. The customers will either discourage such a plan or cancel their orders, and the manufacturers will immediately face operational difficulties. However, if the brand name

business comes before the OEM business, the OEM customers will have no reason to blame the manufacturer.

Third, from the viewpoint of business development, it is easier to develop the OEM business than the brand name business. Primarily adapting itself to a task with higher level of difficulties, the company can cultivate its capability and grow into the future more smoothly.

Fourth, with similar reasoning, OEM business has a faster cash turnover and lower inventory.

It is more difficult to manage the cash turnover and inventory in terms of a brand name business. If we are used to the operational model of an OEM business before entering the brand name business, difficulties in adaptation are expected to be encountered.

Therefore, it is not difficult to find large domestic companies which started from an OEM business encounter setbacks when entering the brand name business. But for companies like Giant and Kennex, with their determination and opportunity, are the first to successfully develop the new products different from its OEM offerings (as we know, innovation is the first step towards brand name business). They even survived the boycott of OEM customers with persistence. Otherwise, it is not easy to succeed in brand name business after having first engaged in the OEM business.

Acer does not solely focus on the brand name business. In my opinion, both OEM and brand name business should complement each other and should be paid equal attention. This way, it will be beneficial in terms of diversifying business risks, maximizing economy of scale, or attaining technology.

With this consideration in mind, even the company is unable to maintain the balance of the two businesses within the short term. It still has to set a long-term goal aiming to achieve a balanced development of the two; that is, when brand name business is in difficulties, it is inevitable that the company takes on more OEM orders. If the OEM customers cut their orders, the company can focus more aggressively on the brand name products. The profit and resources generated in one business can be utilized on the other business in order to maintain a mutually beneficial growth.

For instance, the profit generated from brand name products can be reinvested to enlarge the production capacity and serve more OEM customers. On the contrary, the cost reduction and increased profit brought along by the OEM business can be reinvested in R&D and in the expansion of the brand name business. Such a positive cycle brings mutual and complementary benefits to each business.

Some foreign journalists were curious on how Acer can still achieve a higher growth rate with a business volume four or five times bigger than other companies? The answer lies in strategy? Both our brand name and OEM businesses have mutual complimentary effect on each other.

Some of our competitors often use the pretext that Acer has its own brand name business to discourage our OEM customers from doing business with us. Some orders were indeed lost under such a strategic plot of competing for customers. But most of them return to Acer, and this keeps our OEM business on track and never falls behind other companies. The linchpin is our equal emphasis on the interactive growth of both businesses, which has nurtured Acer's winning advantages in technology, cost, economy of scale, and delivery.

Risks of a Brand Name Business

In the past two years, some people attributed the failure of some companies to their development in a brand name business. Such remarks were also discovered in media when Acer was encountering setbacks in its international competition. But I think this is a paradoxical theory. A brand name is an intangible asset of a company, which of course requires long-term cultivation in its operation. Hence, there is nothing wrong with the strategy of a brand name business. So, where does the problem lie?

On the surface at least, the reason why the failure rate of a brand name business seems higher than the OEM business' failure rate is due to the fact that branded product manufacturers have higher brand name awareness and a more popular corporate image than the OEM manufacturers. Even if both businesses have the same failure rate, the branded manufacturers have a greater exposure and publicity. That is why most people have the impression that a brand name business has higher risks.

From the business operation side, the brand name business is more complicated than the OEM business. Under the same operation environment, the brand name business has to focus more on product innovation and image build-up, while the OEM business does not require brand name promotion. Also, the OEM business has fewer customers with large orders and the payment term is much simpler. A brand name business has small orders, large number of clients, and involves the credit and inventory management in its distribution system. If there is no strong management capability, its chance of failure indeed is higher than the OEM business.

On the other hand, since the OEM manufacturing process is shorter and simpler, the decision-maker can respond immediately if any problem occurs. Therefore, a brand name business has a longer and more complex manufacturing and distribution process. It is often more difficult to correctly and immediately take control of problems that will be encountered, misleading the executives in their evaluation on the effectiveness of long-term investment. The speed of implementing the corrective actions will also be slower.

If the corporation achieves an initial success in the domestic market, it will begin to enter the international market which involves personnel and inventory management overseas. Due to a geographical distance, it makes the management of its operation even more difficult. It is easy to notice that in Taiwan, a brand name business of multinational operations has a higher failure rate than the brand name business that handles only domestic sales.

Hence, there is nothing wrong with a brand name business itself, the problem lies in the company's capability. For Acer, our earlier failure was due to weak company structure and insufficient management capability in globalization.

Analyzing Acer's brand name business before 1992, we noticed that it took a long time to ship the products. By the time the product reached the customers, it was already obsolete. For the OEM business, fast speed and low cost are the keys for the short market cycle business. Acer at that time was slow in product development and high in developing cost. As a result, customers switched their orders immediately as their requirement could not be satisfied.

When Acer lost the OEM orders, we were fortunate to have the marketing strength of our brand name business. As the brand name business had a longer market cycle and did not require a speedy delivery as the OEM business did, Acer was able to exercise its balanced function in making up for the orders lost on the OEM side.

Along the development process, it is inevitable for a company to encounter difficulties or make mistakes. What is necessary for a corporation is to maintain the corporate capability so that it can safely pass through difficult times. Since its early days, Acer has been focusing on stabilizing the company, including the cultivation of talents, accumulation of technology, and the diversification of products and customers. The pursuit of a balance between the brand name and the OEM business has been one measure under Acer's policy of diversification. If a company relies only on very few customers, any misfortune that happens to a customer will invariably affect the company itself.

With the establishment of a balanced system as a precaution, Acer has been able to regain its competitiveness through undertaking the re-engineering effort, applying the fast-food assembly mode in the marketplace, strengthening our operational speed, and maintaining flexibility.

Great Risks in Multinational Management

Frankly speaking, the most serious obstacle that a company may encounter in the brand name business is the risk of managing a multinational operation. Acer has suffered a great deal while managing its operations overseas.

Generally, the traditional export business that Taiwanese companies conduct is mostly pure trading. The sales procedure is considered complete once the goods are shipped out from Taiwan's customs. Since the introduction of the Microprocessor Learning Kit in 1981 to the adoption of "Acer" brand in 1987, our brand name business has been going quite well. As the business scale grows larger, the required capability and commitment to customers have to increase as well. We have therefore gotten more involved in the marketing and distribution overseas with a series of much more complicated multinational management systems.

The first step in marketing is to establish a major distribution system in each country. We have to find a partner who is familiar with the local market and also knows about the technology well. Each party shares half of the advertising budget to cover the brand name promotion expenses.

Among Acer's current list of partners, there are some long-term partners who have built relationships with Acer for over ten years. When we first started, 30% of them were not performing well and had to be replaced. Forty percent of the partners, though able to perform satisfactorily in the short-term, were unable to match our growing pace in the long run. Therefore, we had to spend extra efforts communicating with them and help them to adjust, transform, or even reduce their load and importance in order to find a more suitable replacement.

Gradually when distributors have worked more closely with Acer and become more dependent on Acer, they start to consider the risk of cooperation. In order to win their trust, Acer has set up companies in the local market to provide timely services. Later on, to meet with business growth, we have to supply more inventory and give greater credit. As the pipeline extends, business becomes harder to operate.

Before the paradigm shift took place in the computer industry, there would be cash idle caused by large inventory and credit line. But this would not cause too much of a problem as the market situation remained stable. However, when the computer business began to transform, the high margin business suddenly became a brutal price competition. Acer's inventory around the world immediately suffered loss due to price reduction. What made it worse was that the distribution system was totally damaged due to a sudden change in the industry. For instance, some Acer distributors in Europe closed down their business while others were acquired. Then all of a sudden, the distribution system which we had spent years to build came to an end and we had to start all over again. Acer's operations in both Europe and the U.S. suffered big losses at that time.

Fighting Alone in the Overseas Market

The history of Acer's operations provide a few lessons in the brand name business and the international marketing.

If the enterprise wanting to set up offices in a developed country comes from a developing country, managing a local staff and introducing corporate culture will never be effective and convincing. Also, it would be more difficult to find local elites to work for the company. If the local structure calls for a staff of under ten persons with a low operating cost, a basic business operations mode, and there is no involvement of credit line and advertisement, the issue would become much simpler. This was why Acer's brand name business went well in the beginning.

However, as the size of overseas operation grows larger with the local market, the cost is thus increased due to the geographical distance. Compared to local companies, high operating cost and low management efficiency can invariably cost us to lose to the competition. Even a giant company like Sony can still suffer significant loss following its acquisition of a U.S. movie company. Nevertheless, Japanese companies have their world-class manufacturing capability and can still manage to survive even though they are weak in marketing and management of a local company. But still, this will not be easy for any company if the same situation happens.

For Acer, no matter which country we operate in, our competitors include not only the European and the U.S. computer giants but also the major local companies. If we have to follow their game rules, we will have to increase inventory and extend credit lines, and these would unavoidably weaken our competitiveness. If we choose to focus only on production, shipping, making slim profit only from manufacturing, and leaving the value-added profit to other foreign companies just like the other manufacturers, then there will be no problem. However, would this mean that we have to give up the markets we've worked for years to build and start all over again?

When Acer America suffered a loss in 1992, journalists kept pressing me for an answer, "Will Acer retreat from the U.S. market?" My answer was very determined: "No way. If we should retreat from the U.S., it means we'll set ourselves back ten years." Such a decision would waste our previous effort and greatly affect our morale. If we intend to start all over again, it will delay our efforts for ten years.

Amidst the fierce competition, Taiwanese enterprises are already in a difficult situation to compete in the international market. Regretfully, they also receive very little support from the government. Although the

government is encouraging local enterprises to go international, the related governmental agencies offer more restrictions than support. On the other hand, the general public and press media are not able to distinguish objectively whether the losses are part of a so-called paying tuition to learn something or these are just pure mismanagement. The globalization capability of Taiwanese enterprises itself is not strong. With all kinds of discouraging voices around the nation, it is indeed very difficult for companies to succeed in the international market.

Of course, this does not mean that Taiwan's brand name business does not have a winning chance at all. Instead, we will have to work harder and break through the bottlenecks with strategies. Acer's globalization strategy of "local touch" is one of the alternatives. As such, the local partners not only can share risks together but they are also familiar with the local market, and understand better how to reduce the operation cost. More importantly, after the operation is localized, we will be able to attract more local talents to make a contribution to Acer.

Haste Makes Waste

The development of a brand name business is a difficult process with slow returns, but it is an important linchpin on how to break through the marketing bottleneck. While I was the chairman of Taiwan's Brandname International Promotion Association (BIPA), I often shared this with the member companies: "In the midst of the fierce international competition, we have no time for hesitation. Instead, we have to make up our mind as soon as possible and get right on the process step by step."

Nothing I say here may sound unusual, but this is precisely what Acer has experienced over the years. It contains a few key words: "start early," "determination," "step by step," and "be practical." I will discuss these four keys in two aspects.

First, a brand name business is a long-term project unlike a sale with a definite result. It is similar to running a marathon, where the goal is to eventually reach the destination and not to pursue a short-term speed. Therefore, we have to set the pace along the course. If we proceed too fast and consume all the energy, we will end up having to quit the game. The failure of many brand name businesses in Taiwan is due to executing their plan too hastily in the beginning and losing their continuous resources thereafter.

For instance, Kennex has been a famous brand of tennis rackets, but they have also made a decision to enter the high-tech industry. This is much like a marathon player who also participates in a decathlon contest. This becomes too taxing for their physical strength to compete in both contests and thus, ends up in a totally disappointing result.

The problem in a real operation is that in the beginning of a brand name business, no one knows how many resources will be required. Acer faced the same problem when its operation was extended to overseas market in early years. Therefore, a "long-term operation" must be treated as a basic concept. Along the operation process, we have to gradually adjust our pace through experience and understanding our capability to reach the goal.

Some people make an analogy like this. Doing a brand name business is like jumping from one hilltop to the other. If one should fail to jump across, one will fall right into the valley, wasting all investments therein before. Therefore, proper preparation is a must so that one will have the strength sufficient enough to jump over and to accumulate further strength for the next jump.

I think there are several key provisions in doing a brand name business, and these are: set up the goal for different stages, look far ahead, start early, move step by step, and take a rest when feeling exhausted. Most important of all is never give up.

Lay a Solid Foundation

Secondly, a company should never become bloated and must lay a solid foundation.

In the initial stage of creating a brand name business, there will be more media reports and higher brand name awareness for the company. Corporate leaders must be careful enough to not display a sense of pride, or misjudge his resources to make any investment or to conduct activities beyond their capabilities.

This is like an athlete competing in a game full of applause and hisses. Unless the player is calm enough or very experienced, he or she will either be nervous or gets carried away. After creating a brand name business, companies are likely to be scrutinized under magnifying glass with every move carefully watched. If the performance is good, there will be

compliments. If something goes wrong, the public tends to exaggerate the seriousness of a problem.

For manufacturing-oriented companies, there is a trap in the brand name business. In general, for the manufacturing business, every one dollar can create five to ten dollars of revenues. But, when involved in marketing in the initial stage, due to the bloated credit, every dollar spent can create an impressive ten to twenty dollars of revenue. It seems that achieving growth is not difficult at all. If the corresponding management capability is not established, problems such as poor product quality and large inventory will occur. When cash flow slows down, the operating efficiency will also deteriorate. Under such circumstances, if the decision-maker fails to recognize the nature of the problem and overestimates a company's capability, it only accelerates the deterioration of the issue. For instance, during the period when the Taiwan stock index was at the pinnacle of 12,000 points, suppose there is one company whose assets are at a market value of \$10 billion, then they use this as mortgage to obtain a loan of \$3 billion from a bank to invest in marketing. When the index slides to only 3000 points, its assets depreciates to only \$2.5 billion, but not the \$3 billion used for the loan. Moreover, the company still has to pay interest for the loan, which immediately affects the cash flow of the company.

Acer has always paid much attention to the stability of our corporate finance. We have made reserves for our pension and other plans since the second year of our operation. Furthermore, my wife, with a conservative attitude in managing our stock asset, did not calculate the stock with net value or market value, but with its face value. One time we borrowed some money from the bank in order to subscribe to Acer's new stock shares. Though our assets were much more than the debt, we still felt uncomfortable about the loan. Even so, we can still unknowingly make inappropriate decisions and conduct excessive expansion plans which can possibly create further burden and challenges for the company (see chapter 6.)

In fact, as long as the situation can be rectified, the company will still not remain irremediable even when other companies are facing difficulties. If it is a "one-man company" and the decision-maker is not professional enough to make sound judgment, the loss will be even more serious. This is especially true in the fast-changing information industry.

I have been in the electronics industry for twenty years, and I consider IBM as even more professional company with much experience over the years. When the industry faced a radical change, it was beyond the expectation of either IBM or Acer. In other words, I have been very cautious all the time trying to prevent any possible risks, but financial results often are still unacceptable to me. For those who have engaged concurrently in so many diversified industries with fast expansion plans, I often wonder if they know that they are walking on a very thin ice with serious risks beneath.

When Acer was at the bottom of the valley, media kept criticizing the wrong strategies of Acer's brand name business. If I had concentrated on arguing with the media, I would have wasted my time doing something unproductive and would have further delayed my improvement work. Or, I could have made the situation worse.

Viewing from the angle of human nature, it is difficult for corporate leaders not to argue about any misunderstanding occurring within the company or themselves. Sometimes a company may even cover up the problem to prevent the brand name from being damaged and business hurt. Such behavior only makes the problem more serious. When a company encounters difficulties, it can usually find its way out. But once the problem is made public, the company has to take extra pressures and these make problem solving even more difficult. Therefore, for a brand name business facing difficulties, the fundamental resolution is to face criticism candidly and solve the problems with determination so that its reputation can be rebuilt within the shortest time.

After having gone through a series of challenges, Acer finally has been able to establish a successful brand name business. Acer's achievement in the international market has proven that a brand name business is not a lofty goal for companies to achieve.

The upgrading of a brand image is an endless job. For Acer, the success to date is only the beginning of another era of risks that we will soon encounter. This is a destined process in our company life. It is for this very reason that Acer must pursue its goal continuously with much caution.

*Chapter 4***Comments by Stan Shih at Year 2004**

- Taiwanese enterprises have faced a tough challenge in the branding, imaging, and internationalized management, due to not-well-developed Taiwan image and small domestic markets. This is the fate. In the past years, branding was the most challenging works for Acer international operation. Some Taiwanese enterprises realized the difficulty and decided not to go for the branded business. However, building a common Taiwan image is a long-term issue for all Taiwanese enterprises. Acer was able to look after both branded and OEM businesses in the earlier stage and then split to seek another growth. Acer had successfully transformed in separating the manufacturing and branded businesses in the second reengineering. (Please refer to Chapter 8 “Creating Brand Values” in “Millennium Transformation — Change Management of New Acer”.)

- Transnational management is risky. Acer had proposed many resolutions in the first re-engineering and solved many problems then. However, there have been more new challenges and requiring new strategies. In the first re-engineering, Acer had integrated Strategic Business Unit (SBU) and Regional Business Unit (RBU) into Global Business Unit (GBU). It worked well. But, it did not solve the rooted-conflict of the co-existence of branded and OEM businesses. In the second re-engineering, Acer solved the problem with a strategy of “Three-Single; Three-Multiple”. It is hard to say when will be appearing the newer problems. (Please refer to Chapter 1 “The Second Re-engineering in Acer” in “Millennium Transformation — Change Management of New Acer”.)

PART TWO

CHANGING ACER FROM THE INSIDE OUT

Chapter 5

Out of the Snare of Financial Management

Long before Acer started, there were a few incidents in my personal life that had a profound effect on my decision process with respect to financial management.

When I was a child, my mother ran a small business selling stationery and duck eggs. In helping with the business, I found that these two businesses were very different and each has distinctive characteristics. Stationery offered higher margin but low turnover, while duck eggs, though slim in margin, turned over cash every other day. In fact, we made more money from selling eggs than stationery.

This helps me understand that method of operation vary for every business, depending on the product and the positioning. This is what I call a “business model.” By adopting a correct business model, one can then develop an accurate financial management.

My mother charged a fair price but would not accept price bargaining or credit payment. I often saw elder people in our village spend a lot of time drinking tea and chatting with the neighbors in order to collect a credit payment from them. It was not unusual that they often came back empty-handed. There is a Taiwanese proverb that says, “To be a business master, one must know how to collect credit payments.” The difficulties in collecting credit payments is therefore obvious.

After I started working, I soon realized that Taiwan's banks made loans so easy that they could put companies into bankruptcy in no time. Those who understand banking procedure know that it is easy to secure different kinds of bank loans as long as collateral security such as accounts receivable or letter of credit (L/C) is provided (some company owners even use personal properties as collaterals). Furthermore, some companies can get an even greater loan than the base of a collateral through good “connections.” With easy money from an over-extended credit, corporate leaders often make further expansion into other businesses. However, if any one of the investments does not work out, it can cause a chain

reaction and endanger all other business undertakings concerned.

For instance, many businessmen will buy L/Cs to obtain loans from banks (in other words, there are no real orders on the L/C). As long as all documents for a collateral are complete and the proper procedures are followed, the bank usually does not really check into the background of a loan application before approving it. This process enables the company to sustain operations for only three to five months, after which the company needs to secure another loan in order to retire the previous one. Eventually, the company goes bankrupt.

This is a special snare in Taiwan's export-oriented economic structure. Unless corporate leaders know how to restrain themselves from over-expansion, they will most likely fall into this trap.

Even prior to the beginning of Acer, I was fully aware of and agreeable to the importance of having a solid financial management system. Even under such a strict discipline, there have been times in Acer's past where mistakes were made. With so many bankruptcies, it is easy to know why a solid financial management function is complex and difficult to deal with.

Creating a Transparent Financial Structure

- Straight thinking:** Getting a bank loan to expand business creates a financial leverage.
- Reverse thinking:** Getting a bank loan to expand business results in the closedown of a company.
- Thinking logic:** Expansion of a business through bank loans can indeed generate profits for a company in an economic boom. But in a recession or investment setbacks, it can easily result in financial strait and cause the business to go under.

Since the early days of Acer, I have been emphasizing to all Acer employees that the company's capital must be clearly separated from personal assets and that the two should never be mingled together.

In the corporate law, capital of a company does not belong to anyone but the company. Individuals can own stocks, but the money invested in company stock becomes company's capital and belongs to a company. It is

a criminal act for any individuals to use company fund. Although this is a basic concept, most corporate leaders overlook the seriousness of the problem and care only for their personal convenience and interest.

Sometimes a mistake like this occurs at the time when a company is barely incorporated. On the other hand, there is a difference in short-term and long-term capitals for a company. Shareholder's investment, for instance, can be utilized for long-term investment. Bank loans are for both long-term and short-term use depending on loan conditions, while supplier's credit line is only for a short-term cash turnover. A corporate leader must have the ability to distinguish the nature and usage of various capital sources. Using short-term capital for long-term investment hurts the stability of a financial management system and result in a vicious circle when the cash flow becomes a daily problem.

A theory is very popular among Taiwan business circle, "Whoever does not borrow money to do business is a fool." However, my theory is different: "Borrowing money for business expansion will eventually lead to bankruptcy." What I mean is if a company depends on borrowed money to expand its business on a long-term basis, it may bring greater profits during economic boom. But once the industry goes into a recession or business slows, the company's cash flow will immediately run into trouble and its suppliers and banks will be jeopardized as well.

I strongly believe that a company can ensure its well being for long-term development only by adhering to a correct financial concept. As such, even though Acer has experienced severe setbacks, we can still maintain our strength, make adjustments, and resume fast growth.

Making Timely Adjustments in the Business Model

Down to the implementation level, I place strong emphasis in two areas: business model and financial structure. As Acer is involved in various business fields such as computers, peripherals, semiconductors, and publishing, each requiring different business models and financial structures, we have to make these models and structures flexible to change over the course of time.

I will use Acer as an example to explain the so-called "business model," which is somewhat abstract.

I tell our employees that a 15% gross margin is too high to make

money. Instead, it has to be 10% for us to make a profit. They cannot believe what they heard. How can a lower margin make more money than a higher one? It just doesn't make sense.

Finally, our colleagues cannot help but agree with me. The reason is this: Based on a 15% gross margin, our products will be more expensive than our competitors' products. As a result, sales will be reduced and the operating cost will increase relatively. It turns out that while the gross margin is 15%, the operating expense rockets to 17% which means a 2% loss. On the other hand, a business model of 10% gross margin increases our business volume as price becomes more competitive. It also enhances our efficiency, accelerates turnover rate, and allows us to generate more profit.

In short, this is the simple concept of "small profits and quick returns." If we cannot figure out this basic concept, we can never grasp the linchpin to successfully run a business. Take a look at the following approach as if you are the decision-maker. If a 15% gross margin cannot generate profit, should you raise it to 20%? If you go this way, you will probably end up with declining sales and mounting losses.

Some people may ask why it is 10% instead of 12% or 5%? This will have to depend on professionalism. A decision-maker must have the experience and capability to make the most appropriate decision, which is why the decision-maker has to equip himself with the concept of overall business operations. Various business types require different operation modes: Go for niche market or low margin? What is the turnover rate and interest rate? How big is the risk? All these factors will affect the choice of a business model.

Some business associates often evaluate the success of a business based on the gross margin age. I think this is a wrong concept, as the operating expenses have to be considered as well. For instance, if product A has a 50% gross margin and a 45% operating expense; and product B is 20% and 10% respectively, obviously product B is more profitable.

Furthermore, cash turnover rate is also an important factor. If product C has a 50% gross margin, 40% operating expense, and turns over once a year, the profit margin is 10%. Product D has 10% gross margin, 8% operational expense, but turns over 10 times a year, the profit margin is 20% per year. It is obvious that the product with low margin but high turnover rate can be more profitable.

This is only a simple comparison between two products. Real business operation is much more complicated as it involves the control and adjustment of factors such as inventory, operational expense, and productivity. Especially in today's fast-paced high-technology industry, it takes about three years for a mid-size company to establish an appropriate business model and financial structure as the accuracy of the model requires the test of time and period of adjustment.

Take the gross margin revision as an example. Although the decision can be made overnight, the follow-up implementation may be very complicated and requires long-term efforts. For instance, is it necessary to lower the price in order to maximize business volume or cut on manpower? Or should we increase efficiency and lower cost in order to reduce operating expense? These are just a few of the choices a decision maker must face.

Establishing a Preventive Financial Structure

All these approaches require time to prove their effectiveness and to form consensus. As there is a process of checking and testing in establishing an effective model, a company has to put an "alarm system" in place.

Generally speaking, companies usually make decisions based on a financial report which may be correct only to some extent as it is just a reflection of general corporate performance. A financial report deals with various corporate activities after they have been completed. Thus, actions that are based on a financial report will have to consider the time lag. For instance, payments for the orders coming in today will not be collected until several months later. Decision-makers must have a general picture of the development in mind before a final report is available so that they can accurately weigh changes of the business model and take timely actions as necessary.

A decision maker has to have a general idea about the company's gross margin, revenues, operational expenses, and any policies that affects the business model and financial structure. Many executives only treat these indicators as purely numbers without caring about the meanings behind. They cannot even detect a typo mistake of the financial staff and make

wrong decisions accordingly. I have my own logic whenever I deal with figures. Therefore, if any one of the numbers should go wrong, I can detect it right away. To achieve this, besides paying a full attention to numbers, I usually have a general and clear understanding about the relationships among each variable.

A financial report is like a physical check-up report which contains indicators for blood pressure, cholesterol, etc., it should also include indicators of a company's financial health. If the results should go beyond the indicators, there will be warning signals indicating danger. The purpose of an "alarm system" is to alert executives for upcoming problem areas in an early stage and to seek timely remedies.

Appropriate Percentage of an Owner's Equity

I have mentioned earlier about my theory of "Borrowing money for business expansion will eventually lead to bankruptcy." That is, for a company to look after both growth and sound financial structure, there must be an appropriate percentage of owner's equity.

Take Acer as an example, if our annual growth target is 100%, the owner's equity also should grow 100% as well. Under this situation, if the business model remains unchanged, where will the money come from? Profits alone cannot satisfy the target of 100% growth since a 25% growth is already an outstanding record. Therefore, we have to look for other financial sources. Acer's way in the early days was to re-invest profits or invite employees to invest in the company as shareholders. This allowed us to maintain a certain percentage in owner's equity to facilitate steady growth.

In 1988, Acer went public in the Taiwan stock market, and raised sufficient capital for the company. The capital was then used aggressively for other investments. It was at this point that Acer's financial structure deteriorated and the company's revenue growth slowed down. To solve our financial difficulties, we decided to adopt a two-prong solution: first, get rid of idle assets, and second, to increase the efficiency of resource utilization.

Acer sold two pieces of land located in the Lungtan headquarters and at the Hsinchu factory in 1992 and 1993, respectively (see chapter 8). These transactions brought threefold benefits: cash was increased, extra

profit was generated, and cost for idle assets was reduced. Thus, Acer's financial structure improved immediately as a consequence.

Selling real properties such as land is not something that can be achieved in the short run. When Acer discovered that its financial structure was weakening and decided to sell its land properties, it was at a time when the real estate market was booming. Even so, it still took us years to complete the sale. Therefore, a company must make a prompt decision as needed because it still takes time to implement the decision.

Increasing the Efficiency of Resources Utilization

Although the financial structure was improved after selling the idle assets, we were still short of capital. A more significant change to Acer was the increase in the efficiency of resource utilization. In other words, we were able to use less resources to do more business. This enabled us to establish a new business model.

For instance, Acer's factory in Taiwan originally operated on an 8-hour-a-day basis. Increasing this to 16~24 hours a day enabled us to increase revenues from US\$400 million to more than US\$2 billion a year with the same factory space. Productivity was also improved. With the same resources, we made several times more business than before, and cash flow was also greatly improved.

After adopting this new business model, Acer took on many new business items, such as the production of computer motherboards and the increase in OEM business. Although the profit margin was not as high as before, the increase in net profits enabled Acer to conduct even more business.

Adjusting the business model is not too difficult, but the actual implementation process can be very complicated. For instance, many colleagues disagreed when we decided to manufacture motherboards. I had to persuade them to try it. Only after the manufacturing took place and profits generated did everyone agree with the change. This process took more than a year before we were able to see the results.

Why would adjustments of the business model create conflicts and disagreement? This is mainly because almost all reengineering plans cause short-term pain. For instance, Acer's layoff plan in Taiwan and the U.S. in 1990 seemed disadvantageous at first as it was detrimental to our

corporate image. Also the company had to give hefty severance pay at a time when our financial structure is weak.

It was a very difficult decision as we had to bite the bullet to carry out the layoff plan. But then after the restructuring of human resources, our operation became much smoother.

This is also the same reason why in the last couple of years U.S. companies have much faster and more effective re-engineering process than Japanese companies. IBM, for example, had to spend about US\$8 billion (including severance pay) for its reengineering. All the expenses were written off as a loss in that same year, which made the company's subsequent operation much smoother. The Japanese, on the other hand, chose not to do it this way. They chose to carry the burden for several years, making it very difficult for them to achieve a truly effective reengineering process.

To transform our operation, Acer has utilized almost all possible resolutions of the business model. This includes selling idle assets, reducing manpower, enhancing efficiency on space utilization, increasing productivity and cash turnover rate, and changing product offerings. An experienced medical doctor prescribes different kinds of medication at one time to cure the disease and to take care of the physical well being of his patient. If the symptoms are treated in different phases or by sequence, the treatment may get delayed and take too long.

The knack in doing business is to make the most effective utilization of resources. With the same amount of capital, a company which has a turnover rate of only four times a year obviously cannot compete with a company who does ten turns. Since the cost of capital (e.g. the interest) is about the same for everyone, the company that can utilize capital more efficiently will be more competitive. Therefore, there is no definite answer on whether a company should run a high-margin or low-margin business. The key lies in the fact that the company which can do a better job in both turnover rate and operation efficiency is definitely the winner among all competitors.

In conclusion, a company has to pay for everything that is idle; machines depreciate, employees have to be paid, and capital needs interest payment. All these may seem insignificant but they can erode a company's competitiveness. Generally, the most serious problems are customer credit payment and high inventory. To increase the efficiency of resources

utilization, proper remedial steps must be taken to correct the situation in these two areas.

Escaping the Snare of Credit Extension and Inventory

- Straight thinking:** Encouraging customer consumption helps the company to generate profit.
- Reverse thinking:** Evaluating customers' needs and providing appropriate products help a company to generate profit.
- Thinking logic:** Thinking from customers' viewpoint helps pave the way for a long-term business relationship.

To maintain a sound financial system, I have always had this belief, "Money squeezed out internally is better and healthier than money borrowed from outside." In Acer's early days, my wife was responsible for finance and she tried everything she could to "squeeze out" money internally. For instance, she often went to the warehouse to check on inventory. Whenever she found any over-stocked products, she would urge the sales department to make more aggressive sales. She was very diligent in collecting the accounts receivable, and yet, when making a payment, she would wait until the deadline before she used the fastest wire transfer.

During our start-up days, our capital was quite limited. We would ask our customers to pay first when they place orders. The advanced payments were used to purchase materials to manufacture the product. If the time between importing materials and exporting products could be shortened, it would be a great benefit to the cash turnover. There was no time for any delay in every step, including customs, airlines, and the Central Bank's Foreign Currency Bureau. My wife would involve herself personally with these organizations to make sure that every procedure was completed within the shortest time possible.

While Acer was small at that time, our financial foundation was quite stable.

Why is it that the money squeezed out internally is better and healthier? Under normal situations, only those who need money have to borrow from banks. However, banks are unwilling to lend if your financial

status is not healthy. Banks are more willing to lend money to those companies with good financial status rather than to those with unhealthy ones. This makes the companies in good shape resort easily to bank loans every time there is a cash shortage. But therein lies the pitfall; this tends to loosen up internal financial control and, eventually weakens the company's competitiveness. In other words, securing capital from outside always has its side effects, regardless of whether you acquired it easily or not.

Certainly, business development cannot do without the assistance of financial institutions. To prevent the side effect from triggering a vicious cycle, a company must have a set of systems for self-control in using financial resources.

From my earlier experience in dealing with banks, I discovered that going to banks often projected a negative image of lacking money. It would be troublesome if banks started to question a company's credibility. Ever since, Acer has not taken any initiative to go to banks. Instead, we wait for the banks to come to us. Only once in 1991, I went to banks personally to give briefings on Acer's re-engineering plan. Our model of dealing with banks is to keep them updated regarding the status of our operation on a regular basis. This method has enabled us to maintain close relationship with several banks that have provided steady support to Acer over the years.

But in 1992, Acer also experienced credit withdrawals from several banks. These banks did not quite understand Acer's operation. They only initiated relations with Acer when we were in good shape financially, and they withdrew the credit once we were in trouble. When they decided to do so, we cooperated with them to pay back on time without any delay. Comparatively, there are banks that have maintained many years of business relations with Acer, and have established a win-win partnership based on mutual trust. In fact, banks are like component suppliers to a company. Banks provide loans to companies while companies pay interest for the loan. Both parties are in an equal position.

Managing Credit Extension

Another important principle of Acer's financial management is to have less credit extension (i.e., products are delivered before payment is

collected.) Due to my experience in Qualitron about delayed payment and bad debts, I was very careful in customer credit management. In fact, supplying goods to distributors is like lending money to them. Banks need to do credit checks; so do companies when supplying goods.

In the early days, Acer's clients were mostly government agencies, academic organizations and large companies. There was little risk of bad debts. Later on when Acer introduced the Microprocessor and started to establish our own distribution network, the issue of credit extension began to surface. Due to our advantage in leading technology, we requested that for larger orders, distributors had to pay cash or provide collateral prior to product delivery. For this reason, Acer Sertek had a much lower risk of bad debts than other companies over the past ten years in the Taiwan market.

Although we were careful, bad debts still occurred. One time, a foreigner came to my office for an urgent component order worth about US\$100. Considering that this was an urgent request and the amount was small, I broke my own rule and extended the credit. It turned out that this foreigner never paid at all.

For all the lessons we have learned, I set the rule that all export business must have L/C or bank guarantee. However, once in a while some colleagues would still overlook this problem in pursuit of customer orders. There was once a client, under the pretense of catching some lead-time, claimed that the bank guarantee was already in process. Our employees released the goods without confirming if the procedure was completed. This mistake cost us several million dollars in bad debt.

I often tell our colleagues that the computer industry is a business of slim margin with net profit of no more than 5%. A bad debt of \$1 million, for example, can never be made up unless we are able to make an additional \$20 million of business. This is a serious issue that cannot be overlooked.

Frankly speaking, it is difficult not to extend credit in doing computer export business in Taiwan. For export business, shipments are usually released with L/C at sight. Unfortunately, due to the prosperous development of the computer industry, too many new companies enter the business and fight for orders by extending unlimited credit. This is detrimental to the development of Taiwan's IT industry. Some U.S. marketing companies make use of this weakness to make money for

themselves and transfer the loss to Taiwan manufacturers. Several large Taiwan companies suffered bad debts but did not dare to make it public. The same situation still happen nowadays.

Insisting on no credit extension requires the understanding of colleagues at all levels. Adhering to the principle is very difficult as it is easy to break the rule with excuses such as the pressure of meeting sales quotas, or friendship with customers, etc. It is difficult for sales people not to envy the performance of others. They always complain, "Other companies have extended so much credits and are still doing business. Do we want the business or not?" This is a convincing statement, but my answer has always been this: "Of course I want to do business. But to be safe for a long term, we have to choose good quality business. We would rather take time to look for a better customer than to rush into something that we may feel sorry for. This way, we can sleep better at night."

With all the efforts we have spent on innovation, quality, management and competitiveness, it is but proper that we seek out good quality business. Otherwise we are simply wasting efforts.

I often tell our colleagues that if we should fail due to our own deteriorating structure, we cannot blame anyone else but ourselves. But for external factors such as customer bad debts, we have to be very careful in restraining ourselves from sinking into a long-term burden.

Financial Risks of Overseas Business

At the time when Acer promoted its brand name products to overseas markets, Acer's financial management concepts, such as "squeeze money internally" and "do not extend credit line," encountered a great challenge.

For overseas subsidiaries in need of cash, they should always clear out inventory and press for A/R when due as soon as possible. But inventory was hard to move and it was not easy to collect payments. These subsidiary heads, regardless of whether they were sent from Taiwan headquarters or hired locally, would find the easiest way out for the cash needed. They would ask for the latest products from the headquarters as newer products were easier to sell.

From a sales department's viewpoint, sales people like to provide whatever customers need without thinking much about inventory levels. They often ordered more than they needed and kept these in inventory.

They cared more about how much their commissions would be rather than how serious a problem might be if payment from sales was delayed. They often overestimated sales target, which could easily pass as having a good business to those division heads who did not know the reason behind. The financial situation could fall deeper and deeper into a snare, and might even end in a crisis.

As our overseas business started to have negative impact on the headquarters' finance, we began to promote a system that required each subsidiary to set up indicators, goals and limits for all activities. For instance, there was a certain limit for each product delivery and credit extension. If the payment does not come in on time, the headquarters would put a hold temporarily on the next shipment of products.

In 1992 and 1993, I spent much time traveling around Acer's worldwide offices to communicate with our employees about "business sense." One of our advantages was that most of our employees were the company's shareholders. If each subsidiary does not manage their finance right, the shareholders' benefit would be affected as well. This put some pressure from within for employees to pursue continuous improvement for the company.

Back to the basics, the fundamental solution for financial management is to create an environment whereby a sound system can be effectively implemented. If the system is not perfect, there is still an internal self-adjusting and control mechanism that can stimulate employees' initiative to improve the situation.

In retrospect, Acer went through a very tough time before the overall situation came under control. When the headquarters began to tighten up product supplies, overseas offices also started to collect payment more aggressively and became more prudent in managing customer credits. We are now able to control not only the inventory of our subsidiaries, but also our distributors' inventory, both of which are now part of our overall financial management system.

We strictly request our overseas offices to follow the principle of not overstocking distributors. Some sales people disagree as they consider overstocking to be a form of pressure for distributors to make more sales. In some countries, distributors are entitled to return to manufacturers unsold inventory, which normally causes problems to the company's ordering and cash flow systems.

Therefore, Acer is very concerned about the sales condition of each distributor. If they are not making good sales, we will have to stop our product supplies. Otherwise, we are doing them more harm than good. To implement this system, each sales staff has to fully understand the sales condition of our distributors and to let them know that we are doing this for a good purpose. I believe that only very few companies can do it up to this extent as most companies cannot even manage themselves.

The Financial Trap Caused by Innocence

Most managers understand the importance of a sound financial management. However, they are not able to grasp the exact financial condition and structure of the company. One of the main reasons is an inadequate accounting system, which is due to either intentional cover-up or innocent mistakes.

In Taiwan, some companies present financial reports with some cover-ups for either tax or stock market consideration. This method may allow a company to generate some short-term profits, but the reason that some domestic companies are adversely affected by their overseas operations is a result of falsified financial reports, which often distort the decision-making process. This resembles an incorrect physical health report that can result in a fatal delay of medical treatment.

Innocent mistakes are often made by managers who are considered laymen in their line of work. This makes a company appear to be profitable, but in reality, suffer a loss. It is especially true in the IT industry.

Having engaged in the electronic business for over twenty years, I have a deep understanding about the characteristics of this industry: fast-changing technology, never-ending price reduction, and short product life cycle. As such, there are characteristics in the IT industry that other businesses do not experience. The latest generation of product is always cheaper than the previous one, but its performance and features are also much improved. Therefore, products manufactured with older components become obsolete. The PC is a typical example.

In other industries such as the construction business, idle materials even appreciate in value at times. They never understand that, in the PC industry, materials and products in inventory usually do not have much value.

Hence for the inexperienced who enter into the PC business, mistakes are expected in the accounting system because of ignorance. For example, due to the phasing-out of technologies, the materials or equipment that were previously purchased at \$100 now dropped to \$10 in the market. Without knowing what has happened, they still book it at \$100. When closing books at year's end, it shows a profit of \$50 when in fact there is a US\$40 loss.

Like other products, personal computers require after-sales service. This is the so-called "after-sales cost" in accounting theory. In other words, the cost occurs after the sales has taken place. Hence for every sales, certain after-sales cost has to be added to the financial report (approximately 2% to 5% for PC hardware and 10% to 20% for software.) Without doing so, manufacturers appear to be profitable but they still have to pay for the cost in the future. In like manner, many companies, who are unwilling to have reserves for employees' pension plan may appear to be making money, but in fact this is not true since they cannot avoid such responsibility.

More seriously, some manufacturers who do not reserve after-sales cost think they can reduce the price to compete for more sales. Of course, they can make great sales at a reduced price, but they cannot avoid the after-sales services for the products they sell. In the end, the boss does not even know the reasons why his company fails. Cases like this are common in Taiwan's electronic industry.

To have a sound accounting system, companies must make reserves for all possible costs; bad debts for credit extensions and depreciation for idle inventories, etc. This is a type of system a company must establish.

The toughest problem facing the IT industry is that there are so many "newcomers," who are greenhorns but "over ambitious." They give price quotations based on a business model which they think is profitable but is actually money losing. Some would slash price to gain market share. Others do not even have any strategies. They enter the market, stir up the pricing structure, and then leave the market. This is simply wasting their time and money.

These are the financial snares caused solely by innocence. Frankly speaking, we cannot expect every entrepreneur who starts from scratch to possess experience like ours. Many high-tech companies in the U.S. also have the same problem.

I do not intend to discourage readers who may want to start their own business. Business operation is indeed very complicated. I have consulted many executives worldwide who have many years of experience in managing a business, and they can speak fluently about doing business. However there are very few who know the overall picture and have all factors interconnected. A businessman has to be aware of every areas in his business and be able to assign tasks to each individual. It may be sufficient for the executor to know "what", but the executive needs to know "why", and must have a clear picture about the origins and consequence of its operation.

A company having problems is like a person becoming sick. Possible causes should be identified for a cure to be most effective. I hope that sharing my experience can help provide a general concept so that business executives can transform these concepts into management principles and apply them to their daily work.

I have shared the following comments with Acer employees during an internal seminar. "Financial and material management is the key factor that highly affects the profitability of a company. If we do not know how to manage better than the industry standard, we had better withdraw now or we will suffer a big loss later."

I would also like to share this same message with friends in the industry.

Comments by Stan Shih at Year 2004

- Enterprises are often trapped in ineffective resource management while internationalization. Especially, account-receivable and inventory management are two forever-challenging management items. Acer solved these two challenges through various organization frameworks and operational ideas. Most Taiwanese enterprises going bankrupt is attributed to single company financial report, without consolidating and reflecting those overseas subsidiaries. The management either cannot disclose the problems earlier or they hide the reality, so that all the stakeholders are not able to take necessary actions at the onset of the problem.

Chapter 6

Re-engineering for a New Corporate Life

In 1988 Acer went public on the Taiwan stock exchange. Taking advantage of the unprecedented prosperity in the Taiwan stock market, Acer was able to raise enough cash within a short time to embark on the task of globalization. Dr. Leonard Liu, then IBM's vice president, was hired as president of Acer Inc. Employee morale was high and there was a great confidence about the future. The company was at its pinnacle from an outsider's point of view.

The truth was, Acer's real competitiveness was declining, and all of us, including myself, did not discern the minute changes.

At the same time, numerous computer companies sprang up one after the other in the market. We were not worried though. Compared with companies like Acer, they were toddlers. Moreover, how could a motherboard producer compete with a computer system manufacturer?

When we first heard about products such as "motherboard without CPU" or "motherboard without memory," we were bewildered about how such products could be marketed.

At that time we did not know that a transition was going to take place in the computer industry.

This transition was dominated by small-size Taiwan motherboard companies together with some international PC clone makers. Under such circumstances, a federation of compatible computer-assembly manufacturers was formed in the PC industry, moving from the original vertical integration mode to the new disintegration mode. The original system manufacturers such as IBM, Compaq or Acer, when confronted with these new competitors, accused these new companies of not playing by the "rules." After the first-round of competition, some large systems integrators realized that tough times lay ahead.

Compaq was forced to reduce price levels and beat the competition with its restructured organization and pricing strategy. The new game rule of low-margin and short life cycle in the computer industry settled in.

Acer, at the same time, introduced the “fast-food business model” which enabled Acer to assemble computers around the world to compete head-to-head with these new clone makers.

The turning point for Acer’s revival was its re-engineering effort. The re-engineering process gave Acer a new look, enabled the company to tide over the crisis, and developed Acer into a stronger high-tech company in the global market.

Opportunities and Crises

- Straight thinking:** It is an abnormality if a crisis happens to a company.
- Reverse thinking:** It is normal for a company to face a crisis.
- Thinking logic:** Mankind builds houses to prevent wind and rain, not to prevent good weather. Wind and rain are normal for mankind, so is a crisis for a company.

The paradigm shift which took place in the computer industry toward the end of the ‘80s was not the first time Acer encountered a crisis.

In February 1981, a headline appeared in Taiwan’s Commercial Times daily that Mitac was to acquire Acer. Acer’s financial capability at that time, of course, was weaker than Mitac which had support from their family business. As soon as the news broke, some suppliers halted their shipment temporarily and banks watched Acer’s financial status closely.

We understood that if we did not handle the rumor properly, it would cause a chain reaction wherein banks would withdraw credit lines and suppliers would ask for immediate payment. Fortunately Acer had always been prudent about its financial management. Customers had to pay cash for product delivery, and suppliers overseas were not aware of this rumor. Hence our finance was not seriously affected. At the same time, we had candid and frank communications with the press, and I also sent out personal letters to other business associates to clarify the situation. Very soon, suppliers resumed shipment with us and the sudden turmoil was cooled down eventually.

However, Acer brand name awareness was greatly increased due to this crisis, which was an unexpected benefit.

It is hard to predict when a crisis may take place. In my opinion, it is normal that a crisis befalls a company, and abnormal if no crises occur. We have to be prepared all the time to deal with a crisis. The reason that human beings construct sturdy houses is to prevent any natural disasters, not for good weather. Storms or rains are nature's normal phenomenon, so are crises to a company. Since we understand that houses don't get built when a storm comes, a company cannot wait until a crisis happens to develop its capability.

More importantly, an enterprise should solve its problems as soon as possible when they occur. The occurrence of crises are often brought about by the accumulation of seemingly trivial problems.

Maintaining Organizational Vitality

An enterprise is like a living body. Similar to any humans, it not only needs to survive but also needs to grow so that there is hope for the future. As we look around, people over 70 years old are easily found but companies with over 70 years of history are rare. If the growth of humans are full of pains and sorrows, the difficulties that companies have to experience are definitely a thousand times more than the growing process of human beings.

As inevitable as it is that the development of an organization be impeded, once a company stagnates, it has to revive internally in order for the organization to stay energetic. It's just like if an army fails to expand further, it has to depend on compulsory retirement plans to maintain the morale and vitality of the organization. Therefore as early as many years ago, I have openly announced if Acer is unable to achieve 15% growth for three consecutive years, I will resign from my post.

This is not a casual remark. I was planning to do so when Acer's transformation encountered difficulties a few years ago.

Some people may not understand that for an organization to regenerate, why such important executives such as the CEO has to resign first. It is because my resignation will bring everyone in the company up by one level, which will create an immediate effect on boosting the morale. It is not difficult for me to pursue a second career, however, the growth of several thousand employees and the vitality of the organization cannot be impacted because of me.

For any company or political body, it would be difficult for the organizations to continue to grow if the leaders do not adopt such thinking pattern.

Like human beings, the growth of a company does not center on the increase in height and weight alone but also involves the development of intellectual capability. The growth of a company is much more complicated than that of human beings as it not only requires the capability growth of individual members but very closely associated with the effectiveness of organizational operation.

Why is it so hard for a company to grow? Sometimes it is because conditions required to achieve growth are not established within one or two days. On the contrary, it has to be nurtured through a duration of at least three years. In other words, if a company is not growing today, it indicates that the company did not make preparations of investment or transformation three years ago. Due to this time lag, a company's development strategy is usually either excessive or insufficient.

The deviation in corporate strategy impacts the speed of a company's development. There is no definite right or wrong about the growing speed as different objective environment will bring about different results. What is important is to adjust the pace in accordance with the corporate capability and objective environment. Like farming land, sow more seed while the water supply is abundant or less when there is a drought. Improve the quality of the seeds if they are not good, and fertilize the soil if it is undernourished.

7-3-4 Model

To develop the capability for long-term growth, Acer has a concept: 70% of our operation is dedicated for present growth, while 30% is for the future. In other words, 70% of our current strength is dedicated to create profit, while 30% is for the long-term investment such as human resource development and capability cultivation. Of the profit generated by the 70% of operation, 30% of it must be used to invest for the future, which means our current real profit is only 40%. It will be most ideal if our year-end financial report shows this proportion. It indicates the company always gets 40% profit. I label it the "7-3-4 model."

However this is only theory. The practical operation will be influenced by the objective environment.

In the end of the '80s when price wars were taking place in the computer industry, we found that 70% of our effort was awarded only a 30% profit. When we followed the original model to invest the 30% profit on long-term investment, it turned out that all the profit was lost.

Of course, we will not allow the company to stay on the brink of loss and we cannot stop long-term investment. Therefore we adopted a parallel solution.

First, we increased our efficiency in order to achieve higher profit with the same 70% activity. Second, we temporarily reduced the long-term intangible investment and focused more on gaining profit. As soon as we regain a stable profitability, we will again revert back to the "7-4-3 model."

It is like building a reservoir for water supply and flood prevention, a company has to restore strength and establish a mechanism for long-term adjustment in order to prepare for any unexpected crises and maintain a stable growth. If a company consumes all of its profit without making any reserves, there will be no resources left to cope with any crisis in the future. Acer's re-engineering process is defined as the process of encountering obstacles, adjusting business models and resuming growth. The re-engineering history is a long story and cannot be explained in a few words. First we have to recount the origins of Acer's frustrations here.

There was a time Acer expanded so quickly that we were accused of aiming for unreal goals. After further thought, there were two controversial expansion plans: the long-term globalization project and the Altos acquisition.

Failure of the Long Term Globalization Project

In 1986, we began to enter a phase of aggressive globalization, and therefore placed a big ad in newspapers to recruit talents and proceeded with the plan. As we look back, the direction of the plan was correct, but the model was wrong.

At the time, we set up targets and began to aggressively recruit talents, purchase land and construct plants. However, those targets were set based on our experience and growth rate in previous years. For

instance, 20% annual growth rate in human resources and 15% in productivity. As soon as the implementation began, we encountered the transformation in the computer industry. The original productivity growth of 15% was no longer sustainable and we had to double and triple that rate to compete with others. The expansion plan based on the previous structure resulted in excessive headcount and over-investment. Accordingly, both fixed cost and operating cost became relatively much higher.

As an example, our estimation of human resources growth was that the land we purchased in Lungtan was for a scale of 10,000 employees beside the Hsinchu Science park. Until today, the total number of Acer employees in Taiwan is only 7,000 because much of the assembly had been moved overseas. We never expected such a situation would happen because it was our assumption that all production department would undoubtedly stay in Taiwan. Based on the old experience and rules, blind spots were created in the expansion plan.

We were fortunate to bring in some outstanding talent through this plan. Due to an incorrect model, the sales growth was not as good as expected. And without sufficient growth, the room for the talent to utilize their abilities was limited. Head count expanded, but efficiency deteriorated. The slow decision making and delayed new product introduction all resulted in the increase of costs. The company began to enter a negative cycle and its competitiveness began to deteriorate as well.

While all the problems began to brew and did not show any sign of improvement, Acer stock went public and the stock market rocketed sky high. Acer's "commoners' culture" began to fall apart. Not only the risk- and profit-sharing relations between the company and its employees changed, the company's investment policy also became daring and imprudent.

In 1990, we acquired Altos Computers System at the cost of US\$94 million, which has since become an investment case that Acer has paid the highest tuition in its history.

The Altos Effect

Before the Altos acquisition in 1990, Acer was offered the opportunity to acquire Wyse USA. In fact, my idea was always for Acer to participate

as an investor or look for joint-investors for such acquisitions. Leonard Liu, with his IBM-oriented style, opted to own Altos 100%. I respected his decision with the belief that he had more experience in managing world-class companies. Hence Acer acquired Altos 100% and lost the opportunity to invest in Wyse.

Initially, our reasoning in the Altos acquisition was that it possessed the technical capability of minicomputers and that it had an extensive international distribution network in Europe and the U.S. We were hoping that Altos would provide an added value to our product line and strengthen our capability for globalization. However, after the acquisition took place, the trend of the computer industry started to move in favor of personal computers rather than minicomputers.

More seriously, former Altos employees still had the notion of “low volume and high margin,” which was no longer viable in accordance with the new concept following the business transitions in the computer industry. It made communications with them very difficult. Also, it was a heavy burden to maintain the operation cost for those high-paid individuals. Therefore, big losses occurred simultaneously in Acer Europe and the U.S., which added further operational difficulties for Taiwan headquarters under a bloated organizational structure.

By then, Acer had experienced more than ten years of exceptional growth, but the company also suffered the heavy burden with the fast growth.

To conclude, there were five causes of business disease which weakened Acer's structure: too much cash; gigantic structure; lack of a sense of crisis; slow response; and blurred authority and responsibility.

Fortunately, Acer is a company that knows how to make changes. As soon as we noticed there were problems with our organizational structure, we began to look for solutions.

Acer Transformation

Acer transformation came in two stages. The first stage was to transform the Group organization into various profit centers in 1989. Activities at this stage were not considered re-engineering in its true sense. Instead, they were the downsizing or restructuring processes. Our second stage in 1992 modified our business model and we adopted the

decentralized management approach of a “fast-food” operation mode and “client-server” structure. The development of an innovative management structure and operations philosophy has formally brought Acer into the re-engineering process.

Strictly speaking, the reason in promoting the first-stage transformation was not that we sensed the arrival of the industrial revolution. We decided to make an advanced preparation for the multinational management so we could establish a systematic structure with clear distinction in authority and responsibility.

First, based on a different business nature, the organization was divided into a marketing-oriented Regional Business Unit (RBU) and manufacturing-oriented Strategic Business Unit (SBU). This has become our basic operational model in a multinational business environment and cannot be termed an innovation. However, it established the basic model for Acer’s innovative “client-server” organization structure for the future.

It was also at this time that Acer’s long-term burden surfaced on the financial report. It was the first time in Acer’s history that the company did not meet the profit target. Nevertheless, the record was still acceptable as other competitors around the world were not doing well either.

Employees began to feel something wrong about our organization. Due to the loose structure, each department began to center on its own ideology without cooperating with other departments. The blurred division between authority and responsibility as well as award and penalty brought about an irresponsible state of mind in some employees, and it became difficult to move things forward in the company. We soon called the renaissance meetings to communicate with all employees. These meetings gave us the opportunity to flatten the structure, establish a personnel system with performance as evaluation criteria, and make clear distinctions between responsibility and delegation.

Laying off Employees and Improving Corporate Strength

During the first stage of restructuring, Acer made an important decision — the layoff plan in 1991 to reduce headcount by 300 in Taiwan and 100 in the U.S.

The main reason for the layoff was to restructure our business to be more competitive in the market place as Acer had suffered considerable losses up to this point. We also noticed that some employees, perhaps due to our past success, began to show severe lack of growth motivation and were unable to cope with new challenges. Through the renaissance meetings, we came to a consensus that each department had to set up a reasonable evaluation system and establish a sound organizational structure so that business could operate effectively under reduced human resources.

While the layoff plan was already in place, there were still uncertainties and problems in executing the plan. We spent two months conducting numerous meetings but still could not make a decision on how to execute the plan simply because for 15 years in Acer history, we never had to face something like this.

Our focus of consideration centered not only on the short-term profit or loss. We also were concerned about the future development and the increase in our overall efficiency. We have to resolve the issue of an aging structure and make an adjustment to meet the dynamic business need. It is something like an overweight person trying to reduce weight; besides "downsizing," the body also has to be proportional in shape.

For the layoff in Taiwan, we offered a severance package better than the Labor Law required. Those executives who were in disagreement finally agreed to cooperate. We also took the opportunity to reorganize the structure. Originally we intended to complete the layoff in two weeks, but the news leaked out. In order to protect the company's intellectual property and maintain a stable working environment for other employees, we made a quick decision to finish the whole process on the tenth day and announced the news via a press release.

The bad mood of the laid-off employees was imaginable. But it was something we had to do for the long-term development of the company. We had tried to do everything possible, including employment recommendation letters and the letters to their families.

After the layoff, other employees were worried if there might be a second round. I met face-to-face with all of them. Under the circumstances, I could not commit that the layoff was only a one-time action. I also told them frankly that I did not wish it to happen again. On one hand I wanted to maintain a sense of crisis among our employees, but

on the other hand, I also had to comfort our employees.

Shortly after, Altos was merged into Acer America. After several rounds of layoff, the situation gradually stabilized. During the Christmas of 1992, the Australian business which was not doing well also had to reduce 8% of the workforce. Two months later, the operation began to break even.

As conditions improved, employees began to recognize that the layoff resolution was correct. After all, the layoff impacted only a small group. We need to take good care of the majority that remained with the company.

The Blind Spot in Expansion

During the re-engineering process, the role of executives became all the more important. Our employees understandably had certain worries and doubts because they did not understand the overall situation. Executives who understood the causes had to play a significant role to help stabilize the morale. During the difficult re-engineering process, all the high-level executives in Acer had fulfilled their responsibilities and I think they had done a good job (although this is to be judged by others in the industry).

While Acer was reducing manpower, there had been a general viewpoint in the community that Acer hired Leonard Liu to carry out the layoff plan. In hindsight, both Leonard and I were serious in doing something about the burden that came with years of high growth. In fact, as Acer was willing to face problems rather than evading them and was always for effective solutions, Acer finally won a positive image and growth in its capability to handle many situations. I think this is one major difference between Acer and other companies.

After the layoff, although Acer's operation showed some positive results, the efficiency enhancement still could not catch up with the speed of the industrial transformation. By the end of 1991, Acer had the greatest loss in its history, and the loss (NT\$607 million) was much more than expected. Actually, Acer Taiwan was still profitable, but the loss in overseas business, particularly in the U.S., was much greater than earlier projections. The result was a total shock to us all.

Leonard Liu, who was in charge of both the U.S. and the European businesses, offered his resignation in April of 1992.

During his tenure as Acer Inc's president, Leonard put in considerable effort, picked out candidates for the second-generation executives, and made a great contribution to Acer's renaissance. However, due to fast changes in the industry, successful decision logic that used to work in large corporations was no longer viable. Leonard's departure established a role model for Acer's system of responsibilities management. Leonard's responsible attitude brought profound impact to the independent operation of each division as well as the sense of responsibility for each manager.

Looking back at the history, Acer appeared to be prosperous to an outsider but there had been crisis within. This is not a unique experience to Acer; similar situations happen to many other companies in Taiwan. Where are the pitfalls when companies are charging ahead with expansion strategy?

There are many strategic alternatives for a company to achieve growth. Average people will go with a model that has been proven successful and is familiar to them. When a company is in a smooth operation, it is natural for the company executives to think and act according to their previous understanding. A good strategy will only succeed if the timing and environment are right. The environment, nevertheless, will change with the progress of time. Successful strategies of the past do not guarantee feasibility in the future.

Most important is to face the problem and look for solutions when companies encounter a crisis. As such, companies can change crises into opportunities.

Two months after Leonard's resignation, Acer's re-engineering process formally began.

Re-engineering Efforts

- Straight thinking: A decentralized structure will result in losing control, and is harmful to corporate development
- Reverse thinking: I would rather lose control of the company to make money instead of tightening control and lose money.

Thinking logic: Tightening the control on the company will reduce its efficiency and competitiveness, and the company will still end up in losing control. If members of the company can share common interests and be responsible for themselves, they can contribute the greatest benefit to the company.

From the perspective of investment return, the Altos acquisition resulted in a huge loss for Acer and could be considered a failing case. However, from the development in later days, the failure also brought us benefits in other ways.

Besides maximizing the size of Acer business in the U.S., we, more importantly, solved our crisis by developing a decentralized organizational structure for multinational operation earlier than any other multinational companies in Taiwan. Those include the transformation of an operational model (fast-food business mode,) organizational structure (client-server,) and management philosophy (global brand, local touch). Our later development has also proven the vision and futuristic nature of these models.

It is like playing chess. When we are forced into a dilemma by our opponent, we either make one wrong move and lose the whole game, or take a smart move to solve the crisis. Acer's re-engineering efforts is a risky strategy in saving the company from encountering a crisis.

In fact, prior to the re-engineering process, I had tried to communicate with colleagues on various concepts, such as strategy, mission and vision. These ideas of pursuing for decentralization, delegation, and speed are in major contrast with the traditional "control-oriented" international management or are even unprecedented. I had to convince our employees to accept these unprecedented ideas in order to have further execution and implementation of our plans. I also gave some simple and easy-to-understand examples to demonstrate a theory in other business fields such as duck eggs, stationery and cosmetics, and to encourage our colleagues to give it a try.

The business of fast-food stores is a typical example.

The so-called "fast-food business model" is to transform a Taiwan-based system manufacturing model into a Taiwan-based

component manufacturing model. The components can be air-shipped from Taiwan to regional business units overseas for local assembly. This approach provides “hot and fresh” computers to local customers. It also accelerates the speed of new product introduction and inventory turnover rate.

In fact, when Leonard Liu was still the president of Acer Inc., I suggested that Acer transform from a system manufacturer to a motherboard manufacturer. However it was vetoed by overseas business units on the basis that the economies of scale would be constrained in the initial stage, and the cost would go up. It would result in higher selling price to the RBUs (for Acer brand products) than to the other manufacturers (the market price).

Later on, as the market condition became more tensed, motherboard manufacturing has become an inevitable trend. I tried to convince the RBU staff again, “If Acer does not become a motherboard manufacturer, one day you will have to buy motherboard from our competitors. Are you willing to do that?”

Finally our colleagues agreed to try out this proposal. However our production cost was still too high. The fundamental resolution was to offer our products at a competitive market price. Meanwhile, as our overseas distribution network was already established, a higher price was still acceptable for a while longer. Finally we agreed to give the job to Jonney Shih who was then responsible for the motherboard supply to RBUs with a 9-month lead time, hoping that by then the price to the RBUs would be the same as the market price and that our brand name business would not be in a disadvantageous position.

As such, the SBU was given some lead-time to work out the problem. Overseas marketing units also agreed to make short-term sacrifices in order to help the SBU develop economics of scale foreduce costs. With the consensus established, everyone worked together and the issue was resolved in one year.

Spinning off Companies to Compete Internationally

Of course, any measures for reforms cannot happen overnight. Take the “fast-food business model” as an example, a preliminary organizational operation was already in place before the slogan was called out.

Acer was originally a typical vertical-integrated business. Starting from computer manufacturing, in order to reduce cost and control key technologies, the business was further extended to the production of peripherals (keyboard, monitor, etc.) by Acer Peripherals Inc. (API,) and ASICs by Acer Laboratories, Inc. (ALI). But mostly their outputs were consumed internally within Acer. Possessing leading technical capability internally could pose a burden as they became too dependent on internal demand. It was particularly true when they became bigger and larger in size (Many company groups also faced the same problem). Hence, API and ALI had to enter the open market and compete with other rivals.

After the overall transformation to a key-component model, every Acer product, be it motherboard, monitor, or CD-ROM drives, was prepared to compete in the open market and seize the market leadership. With this concept of modification, we were able to achieve a much higher growth rate with the same level of effort.

Later on, we developed the disintegration concept to the extreme and it became the "client-server" organizational structure for each BU's independent operation. Moreover, the "local touch" approach was further implemented with local assembly, local management, local shareholder in majority and going public in the local market. Acer's re-engineering effort has thus become more complete and comprehensive.

In terms of the evolution of management models for multinational companies, it is very often that SBUs or RBUs are developed only for the independent profit centers. It is a breakthrough,

however, to further become a public company in a local market and not be controlled by the parent company. We often see U.S. and Japanese companies investing overseas on a large scale, but we seldom see their overseas subsidiaries given freedom to operate independently. Acer's contrast to the concept was attributed to our insufficiency in internationalization budget and human resources at that time. More importantly, it was to reduce operating risks and maintain effective operations.

Following the reforms on the operational mode, organizational structure, and management philosophy, Acer had shown significant change since the second half of 1993. Management cost of manufacturing sector was reduced to 1/6 of the original, inventory turnover rate doubled while the average revenue for each headcount was increased more than several 100%.

Communications, Persistence and Public Relations

Looking back on the history mixed with burdens and joys, we can draw conclusions from our experience regarding Acer's re-engineering effort.

First of all, in the process of reform, the utilization of reverse thinking helps a company untangle a bottleneck.

There are two major ways for multinational companies to cope with a crisis. Japanese companies often do not make large-scale adjustment. The result of failing to make extensive reform is to suffer on a long-term basis. U.S. companies most likely will replace their CEOs as the old CEOs are usually incapable of resolving old burden effectively and that they are accustomed to the old thinking pattern which cannot transform to new thinking models. It often depends on a large-scale replacement of executives to generate new thinking patterns.

The biggest difference between Acer's re-engineering and others is that Acer makes adjustments with the original CEO and BU heads. We utilize reverse thinking to develop new models with a gradual and progressive approach. Every measure is given enough lead-time and adjustments are made depending on different situations and conditions. The basic principle is not to hurt the company as a whole.

Second, a new operational model requires communications to form consensus.

Conflict and disagreement will inevitably occur during the transformation of a company. If executives treat conflict from a pessimistic viewpoint, they would rather settle disputes in fear that chaos may occur. To view it from the optimistic side, conflict is the process of building consensus. As long as we can resolve different opinions and achieve goals with appropriate communications, conflict will naturally disappear.

Whenever there is a policy change from a government, it will always provoke demonstration or protest from various groups. In the end, the policy often becomes the offspring of reconciliation and discount in the implementation effect. I often suggest to our government that to implement policies such as calling off tariff, a clear timetable must be defined first and announced a few years before hand so that 3 to 5 years lead-time is given to companies. Once the lead-time expires, there should be no further reconciliation or delay.

Whenever a company's operation encounters difficulties, solutions will be raised internally to solve the problem. When consensus is not reached, the solution often fails to be implemented. Strictly speaking, decision-making is not difficult, the problem lies in whether employees share the consensus for implementation. Therefore we have to conduct forceful communications so that everyone is willing to follow the new model.

Third, there has to be a commitment to execute with results promoted on a timely basis.

Along the process of re-engineering, objections or conflicts will often occur due to the uncertainty of results. Therefore it is important for an executive to maintain the perseverance to implement. Moreover, goals for different stages have to be defined. Once the goal for a stage is reached, the successful result has to be announced to encourage the morale so that everyone can have a taste of success. If the result is not announced until the whole project is completed, probably the morale might have already disappeared.

The Role of a Leader

During recent years, whenever I have the chance to share re-engineering experiences with business associates in the industry, I am often asked, in the process of corporate re-engineering, what role should a leader play.

As a corporate leader, I can often walk around offices and make more observations than other colleagues. At the same time, I also keep working on my brain to generate new ideas. Furthermore, I have to conceive various convincing statements from different angles and promote my ideas and philosophies every day. Meanwhile, I will continue to discover certain new achievements in order to prove the effectiveness of the company philosophies to reinforce confidence and give pressure to those departments that have not achieved tangible results. The whole company will then be motivated in this way.

For instance, in order to convey the strong feeling to Acer employees that we are transforming towards the disintegration mode, I called out a slogan: "Except wives and husbands, Acer sells everything!" The statement shows that besides systems and peripherals, Acer also sells

components, technology and services as long as the price is right. Besides making it sound interesting, it aims to alert our employees with our determination to change and further to recognize breakthrough we must undertake.

On the other hand, while a company leader may propose some innovative philosophies, if executives in charge of daily operations can make timely and appropriate interpretation for implementation, the effect will be more obvious. As these executives in daily operations can better understand real needs of their colleagues, they will be more convincing to convey the concept of such a philosophy. It is like in a group-wide activity, an order to "march" from any one individual will not be followed by the crowd. But if the order is given by a company leader and executive levels will also echo the order, everyone will take a concerted action to move on.

In other words, the job of a company leader is first to promote innovative thinking and then materialize the new strategy which is originally vague in its concept. Next is to communicate the new strategy internally, form consensus, and then declare action plans clearly. Colleagues, on the other hand, play the role of executing the strategy. The roles of a company leader, executives and colleagues are closely connected and are all-important in their respective functions.

Blessings in Disguise

To Acer, after encountering a series of difficulties, there are two impacts that make us believe the future will be better. First, various frustrations have taught us that any condition may happen in the future. The adjustment in a state of mind will make us more careful and alert in dealing with the changes in an environment. Second, as we have experienced numerous challenges and accumulated much experience, we have established a stronger immune system. Coupled with continuous improvement, we have established more functions that are immune to external challenges.

On a long-term basis, these conditions will change as time passes. A human being will get old, so will organizations. How long can the strength sustain? Can it continue after it is inherited by the next generation? Therefore I always believe that there must be a root strength to motivate the company to continue growing without making mistakes.

The strength has to come from an “institutional structure.”

For instance, I have repeatedly mentioned that to develop human resources, a company cannot make long-term investments with short-term capital. These are the guidelines that must be followed. With just a concept alone, it will not work. We have to establish an institutional structure to allow the company to make continued investment in human resources and secure sources for long-term capital. That is why Acer’s “7-3-4 model” is in place. Under such a structure, it is less likely that the company will fail to make a long-term investment. Otherwise, without an institutional structure, any action will bring unforeseen dangers for the company.

The survival of a company is much more difficult than extending a person’s life. As a company consists of a group of different departments, its chance in making mistakes and losing control is much greater than one individual. If we consider how much education a person must receive during his lifetime, then a company apparently must receive much more education. However, do corporate leaders really provide sufficient education to their employees? Obviously it is not the case with most companies. Why are most companies likely to fail? It is because they carry so much risk unknowingly and fail to take preventive actions.

For Acer, as we have committed to developing human resources and sound financial system, it had enabled us to tide over any crisis safely. In the future, there is no reason for us to relax and overlook similar issues.

The Philosophy of Losing Control to Make Money

Having practiced the re-engineering process, I am often asked that with such a loose structure, what if I lose control? My answer is: “I would rather lose control to make money than control to lose money.” Once you figure this out, you would not worry all day long for fear of losing control.

I often make this analogy. Suppose, there are three kids in my family. The first one appears to be obedient but likes to spend money without even being able to make his own living. The second one is not willing to follow the family rules but recognizes the family tradition and goes on his own to establish a business and brings glory to his family. The third one not only is disobedient but also damages the family reputation. Mirroring the three kids as Acer’s businesses, the first kind is like a prodigal son and

should not be allowed to continue as is. The second, of course, is still a member of the family. For the third, he has an alternative to leave the family and be deprived of the rights and obligations, or become someone like the second son, to establish his own business under the general principle of the family.

For overseas affiliates, Acer's role is to provide brand name and R&D support, much like a country's provision of diplomatic and defense services to its citizens. If the board of directors of any business decides to sever their relations with Acer, we will have to agree. However, if Hawaii and Alaska decide to go independent one day, they cannot expect to get the continued protection from the U.S. government anymore. To enjoy the protection, they will have to follow the U.S. laws and systems, place the U.S. national flag and pay taxes.

*Chapter 6***Comments by Stan Shih at Year 2004**

- When a corporate is in a favorable circumstance, the development tends to be diversified, either expanding the original business and/or aggressively pushing the new businesses. Especially when the funds are abundant, the cases of ineffective investments will naturally increase; after a while, the corporate will be trapped in a hardship and need to take off a re-engineering. If the corporate can face the challenge and conduct the re-engineering right away, there will be a chance of rebirth; otherwise, the corporate will be weeded out for whatever reasons. In a continuously faster and more intense competition environment, corporate re-engineering in various scales is a necessary means to break through the growth limit. In a critical moment, a corporate leader plays a critical role. Quite often, the corporate will success or fail determined by a decision making. A corporate leader has to face the reality, change the mind-set, and adopt the new vision as well as the new model. Otherwise, the person on the post should be changed.

Chapter 7

Setbacks and Restarting of Globalization

In 1990, Acer investments in overseas business suffered a huge loss. Suddenly, accusations and derision poured upon Acer.

At that time, government agencies (Taiwan Stock Exchange) questioned our continued investment plans overseas and journalists criticized that Acer had been “dashing” too fast. Even shareholders and employees were not supportive. Some colleagues even challenged me directly why the money they worked so hard to earn was lost in overseas operations.

Almost ten years of smooth globalization operation was encountering a bottleneck seemingly hard to break through.

As pressure continued to build up, I had to come up with solutions. Suddenly an idea occurred to me. Under the circumstances, the only way to convince our employees and investors was to invite our foreign partners also to invest in Acer and to share the risk. If we invest, they will invest more; if we lose, they will lose more. That was the only way that I could continue to make an investment overseas.

Subsequently, Acer developed a new strategy of “global brand, local touch.” This strategy solved most issues that had been hampering Acer’s globalization plan, such as finance, brand name image, and management efficiency. It is like applying the right medication to cure multiple diseases at once.

Since 1993, Acer has become the No. 1 computer brand in Latin America, Southeast Asia and the Middle East. In 1994, Acer’s U.S. operation began to turn profitable after continuously suffering losses for several years. Acer has since become the ninth largest brand in the U.S. personal computers market among fierce competition. It made Acer the seventh largest computer manufacturer worldwide in 1994.

This strategy does not come from an accidental inspiration. On the contrary, it is derived from countless lessons, challenges and pressures and thus formed a unique globalization model for Acer.

Establishing an Effective Multinational Management

- Straight thinking:** If local executives of overseas operations are incapable of maintaining an effective management, we should give up localization efforts.
- Reverse thinking:** If overseas executives fail to maintain an effective management, we should implement the localization further.
- Thinking logic:** Since localization has been a general trend, we should develop an effective management tool to overcome difficulties instead of quitting.

My earliest international experience could be traced back to my days at Qualitron when I was sent to support the U.S. branch office in Los Angeles. As the office was understaffed, we had to do everything ourselves including the clumsy way of using a telex. This was a new experience for me who had always been an engineer and a manager.

There was another joke at that time. We made one shipment to Macy's, and we waited and waited without receiving the payment. Finally we figured out that we didn't send them an invoice. For export business in Taiwan, all we had to do was to take the order, make the delivery and take the L/C for a bank draft. We did not even have the basic experience of issuing an invoice.

The example makes me realize that the know-how of internationalization is much more complicated than expected. In a foreign country where we are not familiar with the people and the place, it is sometimes difficult to collect a payment. If executives are not prudent and extend even more credit lines in order to get orders, they will not know where to recover the bad debt, which may have been created intentionally by customers.

With this experience of managing an overseas business, we immediately planned to set up a U.S. office when Acer was started. At about that time, Mr. Edward Chang, one of my classmates, who worked for Hewlett-Packard of Silicon Valley, happened to come back to Taiwan. I invited him to join Acer to be in charge of the U.S. business. As Edward had never done any business before, I crammed him with a session on how

to do business. He took it seriously and even tape-recorded the lesson. As such, Acer made the first step in globalization.

Growing with Partners

Acer U.S. office was officially inaugurated in 1977. Edward had a 60% share, and Acer had 40%.

Before this office was set up, we could only make 5~10% of commission out of every sale.

After the office was established, Edward would get goods from suppliers, resell to Taiwan, and Acer Taiwan would pay the commission to the U.S. office on a regular basis. This way, our U.S. office could get larger discounts from the U.S. supplier and generate greater profits from the price difference. Moreover, the calculation on commission was faster and better assured. More importantly, the U.S. office could enjoy credit lines extended from the suppliers, and sometimes Edward would pay for us first. His financial ability was much stronger than all the other Acer founders. With his help, our operation went very well.

Acer's history is a history of continuous partnership. Acer was co-founded by several schoolmates. The U.S. operation was also a partnership. The establishment of branch offices in Taichung and Kaohsiung in 1979 was also composed of 40% from Acer and 20% from three other partners in each city. This model has greatly influenced Acer's later strategy of "local touch" and "local majority shareholders."

The establishment of a partnership network was of great benefit to Acer's early development. For the first five years, Acer's main business was distributing foreign products in Taiwan. The Acer U.S. office was responsible for communicating with suppliers and purchasing. The branch offices in Kaohsiung and Taichung were responsible for the education, promotion and marketing in the local market. Such cooperative mode gradually opened up the market for more business and made some money for the partners.

In 1989, Acer's operations in the U.S., Taichung and Kaohsiung were merged into Acer and became Acer's fully owned affiliates. After the merger, the company assets were increased. Furthermore, the leader in each business unit had developed his career to its limitation in that environment. Transferring them to a larger organization gave them the

opportunity to further exert their capabilities, and Acer was therefore able to recruit more talent.

There were a few acquisitions that Acer made without following the thinking pattern, better known of which were the acquisition of Counterpoint in 1987 and Altos in 1990. The result was dismal as we lost both assets and talents.

These two companies were sold to Acer at a premium. That is, besides the net value, Acer also paid for goodwill and other intangible assets. Not only did we incur extra expenses, we also suffered from serious "indigestion" due to the overall merger approach. Employees of the acquired companies were unable to adapt to the new corporate culture on a timely basis, and the deteriorating market condition also made them lose confidence, and they gradually left the company. At the end, Acer not only lost money but also lost the people.

Comparing the Taichung and Kaohsiung merger with the acquisition of Counterpoint and Altos, executives in the former case became Acer's shareholders via an exchange of stocks for Acer's shares. Both capital and workforce "stayed with Acer to fight for the future." The shareholders of Counterpoint and Altos, on the other hand, sold their stocks in exchange for cash, and the management teams stayed to "work for Acer." The different mindsets here definitely made big differences between the two and therefore generated different results.

Credit Extension Resulting In Vicious Competition

Acer's internationalization was relatively successful when the company was still small. Business at that time was mostly distribution and taking orders without issues of inventory and credit lines. However, when Acer further expanded its business scope and had to extend credit lines and increase inventory in order to promote brand name products, two problems arose. The first is the material loss (including bad debt and inventory caused by wrong forecasting). The second is the increase in operating cost. These are also the two major problems encountered by most international companies.

Accounts receivable involves credit management, and credit itself at times is something intangible. It requires more time to establish a system to manage the intangible credit than managing the tangible assets. The

system not only may vary depending on different industrial environments and client qualifications, it also involves the competitive trend on the market. In other words, when the market is in a fierce competition, credit line becomes an important key in the competition. Therefore it is difficult to take care of business development and a stable operation at the same time. Even though we are committed to conducting credit management, the practical implementation is still not easy.

Take many Taiwan companies which enter the domestic market from an export business as an example. They cannot prevent the occurrence of bad debts even in their own country, not to mention dealing with foreigners in foreign countries. There are two exceptions. First, the company is running a niche market and it controls the absolute winning advantage. Second, the industry's basic commercial environment is cash transaction. For most industries, the normal payment is by post-dated cheques of 30 days or 180 days in some industries. Under such terms of payment, it is very risky.

The basic business environment of the IT industry in the '90s deteriorated at a great speed. With new companies competing with the professional IT players, once an unbalanced situation happens between production and sales, most manufacturers would choose to store the stock in the customers' warehouse with a better chance for sales, instead of storing the products in their own warehouse and watching it depreciate. Therefore, it enters the vicious cycle of credit extension.

Acer encountered more difficulties than other Taiwan companies as we needed to extend credit lines in many countries at the same time, especially in the developed countries.

In the third world countries, Acer formed cooperative relations with large local clone makers and made deals by L/C. Moreover, the third-world countries were riding on high growth with good profit and low risk. But in the U.S. and Europe, we suffered from the credit line problems in about ten countries. In Europe, we specifically bought insurance for bad debts. But it is not a cure-all and long-lasting solution as insurance is still a cost and the time to get payments from an insurance company usually drags on for three to five years without the full amount being redeemed.

Hence after many years of experience accumulation and paying tuition, Acer slowly built up its credit management system in the developed

countries. First we established the credit investigation system. For customers we are unsure of, cash payment is encouraged. For customers we are sure of, we try to diversify our resources to as many customers as possible. Next we established an alert and responding system on the market transaction status. For instance, we cultivated the acute observing ability of our colleagues so that they were able to take prevention once they discovered anything abnormal. When customers delayed their payment, there was also a system in place to tackle the problem. I called the natural transformation into the organizational behavior as the "organizational infrastructure." It requires at least three to five years to complete the process and it can only be achieved with no personnel turnover.

Not to Ignore Inventory Issues

Besides accounts receivable, inventory management is another tough job in the globalization process. Inventory involves the prediction of market, and the market situation often fluctuates. For overseas markets, we have to reserve even longer lead-times due to a geographic distance. To forecast a market condition, one usually has to have a lead-time of about six months. If the forecast is not accurate, it will generate inventory problems.

The high inventory usually has a few chain reactions. First, short of cash. Second, reduction of prices. Third, hot-selling items will be out of stock while slow-moving items will pile up in inventory. In due course, there will be communications between headquarters and overseas sales offices and distributors. Business decisions would often be made based on inaccurate information made up to cover the truth. Fourth, when the inventory cannot be moved, the new leading-edge products cannot be launched for avoiding obsolesces.

Acer is not the only one who suffers from an inventory problem. In 1994, IBM achieved \$10 billion in revenues but lost \$1 billion, among which \$700 million were inventory losses. Compaq also failed to introduce its Pentium models on a timely basis due to its high inventory of 486 machines.

This is like adjusting the water temperature when taking a shower. If the distance between the faucet of a shower and the water heater is very

long, it is more difficult to adjust the water temperature to a perfect level. Increasing the temperature may need twenty seconds, but one is already impatient after ten seconds so you adjust it further again. Twenty seconds later the water will be too hot and we have to make the adjustment again. When the product supply is far away from the market, there will always be the problem of a time lag.

Before 1988, Acer conducted overseas business by cooperating with international importers using an FOB pricing model. It only took around 45 to 60 days from material purchasing, manufacturing and shipping to payment. When we introduced our products around the world markets, it would take 1 to 2 months from product manufacturing to shipping, and another 2 months stocking in local warehouses. It would be very nice if we could get the payment in two months following the sale. In a case like this, the cash turnover required at least six months, which was three to four times longer than the original lead-time. In other words, suppose it took \$1 to do \$1 business before, it will now require \$3 or \$4 to conduct the same amount of business. This is the trouble of globalization.

Of course, globalization is not all unfavorable. Its advantage is to gain a higher added value. That is to say, the marketing side was commissioned to others before and now we handle this portion ourselves. Of course we now have to assume the business risk of this part by ourselves. If we are able to manage properly, we will be able to secure profits both in manufacturing and marketing in global business.

Acer has since adopted the "fast-food" business model -- moving product supplies to where the market is. Even though the efficiencies of logistics differ by locations, because they are closer to the market, the chance to adjust supply to the same pace as the market is greater.

More importantly, after the "fast-food" model was implemented, our inventory turnover was lowered from 100 days to 50 days. This helped not only to have relatively more cash, but also to greatly reduce the risk, because the risk of the inventory of the last 50 days would be ten times greater than the initial 50 days. This is why Acer was able to enjoy the added value of both manufacturing and marketing since 1994.

Of course, such a "fast-food" business model cannot necessarily fit in the material management system of all companies for issue of material management. But I think principles are the same. It can provide solutions to the areas such as marketing and production forecast, financial

management, inventory and cost control. To identify the most effective management model, the linchpin lies in whether managers themselves are truly professional or not. This so-called "professionalism" can be divided in two. The first is "professional" regarding the industry and the second is "professional" concerning the management. As such, corporate leaders can provide insight and creativity even under pressures to meet the needs of the company.

For instance, two fast-food chains, KFC and McDonald's, do not employ exactly the same management model. Which part of the fast-food business should we emulate and incorporate into our business, then develop an appropriate management model? Therefore, besides possessing a breakthrough concept, corporate leaders must be able to make gradual adjustments based on real situations and objective environment during implementation.

High Operating Expenses

Besides credit extension and inventory bringing about the loose control of material management, another problem of globalization is the control on operating expenses.

When globalization is small scale, operating expense would not be too serious an issue. Accordingly, the benefit generated is also limited. Therefore when the company achieves initial positive effects in globalization, it will surely expand its size in order to achieve greater benefit. As staff increases, the overseas offices also have to build up a more complicated system to cope with the increasingly complex issues of management and operating expense.

Acer America's problems began from the acquisition of Counterpoint. The purpose of the acquisition was to increase business volume, which in turn represented the increase in personnel. The increase in operating expense, inventory and accounts receivable constituted a cycle of expense explosion.

However, the Counterpoint impact was only limited in the U.S. Shortly after the acquisition of Altos, our European operation suddenly exploded in size from its original simple organization, due to the takeover of the Altos operation in Europe. It was unfortunate that as we came across the profit decline in the industry, all problems surfaced at one time,

including the issues of expense, material management, corporate culture and management efficiency.

At that time, the overseas operation of the company was already losing, but on the other hand the business still had to carry on. It was indeed a up hill battle.

Overseas business, due to geographical distance and unfamiliar environment, usually requires higher operating expense than domestic operations, which is reasonable. However, most overseas businesses have unreasonably high operating expenses. There are two major reasons. First, high expectations by headquarters lead to aggressive business expansion overseas. However when business performance is not as good as expected, the high operating cost is beyond retrieve. Second, as the overseas business is not owned by local managers, the urgency of cost control is often not there. Hence their decision-making tends to generate two tendencies: big revenues and spending money easily. Big revenues normally come with more power. Spending more money also makes doing things easier. The operating expense will explode along with the development of market.

Localizing Overseas Investment

In its early years, Acer fully delegated its authority and responsibility to the local managers in overseas operations but still could not solve the two issues. The reason to adopt localization was because on one hand, we did not have sufficient high-level executive candidates for out-posting. It is our belief that localization will be the trend and the goal Acer will pursue. On the other hand, Acer has always been pressured for lacking of experienced executives over years of rapid and substantial growth. However, initially managing branches by local executives in most cases had been a failure. Causes may vary, but in general it could be attributed to poor communications, a vital tool which can help the local executives to better understand and appreciate the Acer corporate culture, then to create a sense of belonging.

It was not until the implementation of Acer's re-engineering effort and workforce reduction that we were able to better manage the overseas operation. We began to review and gave up those businesses that we did not feel confident about and concentrated our resources on a few products and channels. For instance, we slowed our pace in minicomputers,

networks and workstations, and focused our resources first on developing the personal computers. After communications with overseas business had been improved, the consensus on company-wide policies could be reached much faster, and a sound and effective operation in market development was born.

Meanwhile, due to many years of human resource development, Acer was finally able to send qualified executives overseas to be part of the local management. Also due to its previous failure history, it further justified the expatriates to pursue reforms in the local market. Especially in the past two years when most large computer companies encountered losses, Acer was still able to beat the odds and achieve a high growth rate and profitability, which made Acer's management system and corporate culture more convincing.

In hindsight, Acer made two mistakes in our globalization management models.

First, the local managers were delegated too soon before they had acquired sufficient understanding of the company. Consequently, their business decisions would often be away from the company practices. However, we did not give up the localization efforts but further implemented the "local touch" strategy for the decision-makers in overseas businesses to become the shareholders. This way, they would be more careful in controlling the budget.

In particular when the profit margin for personal computers has declined to 2 to 3%, a wasted budget would have to be made up by 50 times more sales volume. Saving \$1 is of course easier than doing \$50 of business. As such, the operating expense will not explode without limit.

Second, our old policy required expatriates to return to Taiwan after a period of two years. It turned out that by the time they finally got to understand the local operation, it was about time they had to leave. When they come back to Taiwan, oftentimes there were no suitable positions for them. These people were therefore recruited by other companies to serve as their overseas business heads. Meanwhile, Acer's operation ended up being managed almost always by inexperienced staff. Since 1991, we revised the system and extended the term for expatriates to five years and more. In recent years, we were able to quicken our pace in overseas business expansion due to the stable personnel arrangement internally.

The globalization effort for companies is a complex and difficult task. The management capability of Taiwan companies is already inferior due to our late initiation. However, it is a great pity that the general environment in Taiwan still objects in many ways to a company's globalization. Although it seems that the government was promoting globalization since 1986 and the companies seemed to be able to aggressively expand their business horizons, in reality it has some practical difficulties.

However the disadvantage in internationalization does not mean that it will not work. Our method is to develop a way of our own.

Creating an Effective Environment for Internationalization

- Straight thinking:** Learning the successful multinational management model in the developed countries can ensure effective globalization.
- Reverse thinking:** To conduct effective globalization, we have to develop a management model of our own.
- Thinking logic:** Following the footsteps of first-class companies will only make us second- or third-class enterprises.

Over these few years, the term of "internationalization" contains both positive and negative images in the minds of most of the general public in Taiwan. It demonstrates that Taiwan companies are able to catch up with the world trend and achieve outstanding performance in the international market. However, it also generates corruptive practices in business undertakings. What made it worse was that no matter the government or the general public, they often considered companies' internationalization efforts as spending money overseas and moving the industry abroad.

What is the reason?

The most common phenomenon in Taiwan shows that the internationalization in Taiwan is not for the company but for its boss or major shareholders. In other words, most of the overseas investments are the personal investments made under the name of the boss or major shareholders instead of the companies.

Why is it that the CEOs will take the personal investment approach

instead of the normal corporate investment? The major reason is that the Taiwan government has applied too stringent rules on overseas investment.

I shared the same helpless feeling as many others faced with the repeated reviews of government when applying for permission for overseas investments. The government has a justified reason to tighten its control in order to prevent company capital from flowing overseas. But on the other hand, the government adopts a loose control over personal cash flowing overseas. In facing the situation, there are only two alternatives for CEOs; first, in order to get approved by the government, the company has to reduce its capital for overseas business, and therefore the overseas business is operated with a very tight budget; second, the company will proceed with overseas investment personally. No matter which way is chosen, it will greatly damage the globalization of a company.

For the companies which opt for the first method, as the budget is tight, the companies have to adopt other alternatives such as providing products in replacement for capital in order to maintain the cash turnover overseas. However this can only sustain for a very short time. Once the product sales are not as good as expected, the company will immediately face the problem of over inventory and accounts receivables.

For the companies which opt for the second method, it is difficult to prevent the potential "interest conveyance" between the company and the individuals. More seriously, once any problems occur to the overseas business, they will not be reflected immediately on the company's financial report, which will result in the decision of a misleading policy. As there has been a large number of such companies, the government in Taiwan tightens its control and preventive measures but it also makes the companies embarking on globalization efforts encounter more unreasonable inconveniences. Under such conditions, a company such as Acer, which legitimize its globalization efforts, becomes the minority and the innocent victim of the government's preventive policies.

Regular Operations Becoming an Oddball

Acer suffered its first financial loss in its overseas business in 1990. As Acer adopted a consolidated worldwide financial report, the losses in overseas operations were consolidated to the headquarters' accounting

report. However the Taiwan Stock Exchange requested Acer to book the accounts receivables to our overseas affiliates as bad debts as well.

The request is proper and needful for any overseas investment made under the name of individuals as the overseas business is not invested by the company, and any losses would not be reflected on the corporate report. Therefore when the accounts receivables fail to be recovered, it is necessary that we reflect the loss as bad debt. However it was a different case for Acer as we had booked all the losses and included them in the financial report already. If we were to book the accounts receivables as bad debt again it meant we had to report two dollars of loss for every actual one dollar, which was totally unreasonable.

It took us half a year to communicate with the Stock Exchange committee but the responsible staff were unable to understand. It was not until the case was finally presented to the vice chairman of the committee, Mr. Lu, Tung-Ing, that he understood and agreed with our viewpoint.

We thought the same situation would not happen again. However, when Acer applied for a capital increase in 1994, a different staff-in-charge made the same request. History repeated itself, and the case was delayed for another half year.

I once read about Sony's corporate history and found that forty years ago when they started on globalization, they also could not get the understanding of the Japanese and encountered the same problems, one of which was the consolidated financial report. I could understand exactly how they felt.

Of course there are many complicated issues involved in globalization. The extension of a logistics pipeline can easily generate problems such as loose control. Internationalization may bring two problems. The first is: the change of an operation model brings along the transformation in management models. The other one is: immature or unethical management may use this as a means for corruption or money laundering. The former is a challenge, while the latter is a real corruption. The government agency is justified in defining regulations to prevent corruption. But it also irresponsibly confines the development of the companies of integrity.

Taking the consolidated report as an example. I agree and support the rules and regulations set by the Taiwan Stock Exchange. However, regulations set under the circumstances often fail to understand the

characteristics and operations of individual industries, and they require all companies to follow the same rigid and inflexible policies. Such restrictions appear to assume that all companies are corrupt. Companies which do not defraud are restrained by the unreasonable game rules. How are these companies able to compete in the international market?

If new business models developed for the globalization efforts are considered corruption and company is therefore restricted in many ways, it becomes a punishment for those companies in pursuit of innovation and improvement. Acer is the one that understands most about the bitterness.

The Puzzle of Internationalization

Government policies are not the only hindrance to globalization. The overall banking environment is similarly damaging to the companies in promoting international marketing.

To date, most Taiwan banks still maintain an export-oriented operational mode. In other words, the banks are often too lenient with loans to exporters. However these export business do not contain the power to control the market. Once the market disappears or buyers withdraw their orders, the bloated credit extension will further increase the risk of bankruptcy.

On the other hand, the capital required for a company to develop the international market is about 3 to 5 times more than the pure export business. But the banks are unable to provide financial support in this area.

As Taiwan's banks do not go on internationalization before the companies, and the overseas operation of their customers are remote, it is very difficult to conduct credit checks and auditing. For those bankers who do not understand the industry, the marketing risk and reward of the industry is often obscure and difficult to explain. Even if the company can present its accounting data to the bank as evidence, it can still be suspected as a cheat. Therefore it is inevitable that banks are reserved about extending support to companies' international marketing.

But to change to another viewpoint, maybe it's the prevalent cheating behavior of companies that result in the lack of confidence from banks. Since it is so difficult to convince laymen, I think we had better start by convincing the people in the same industry.

For instance, we promote that our overseas affiliates go public in the local market. If there is any disguise on our financial data, would it be possible to get away from the inspection of the stock exchange committee in each country? Moreover, many of Acer's worldwide employees and partners are Acer's shareholders. If we are unable to convince them that every penny the company makes is at arm's-length and has no conflict of interest, how can we survive without their trust?

As a matter of fact, the obstacles applied to a company's globalization efforts by the business environment simply reflects the basic state of mind of most people. Up to today, Taiwan society still holds a paradoxical viewpoint that overseas investment is sacrificing the country interests in benefiting other countries, and companies are making investments abroad for short-term benefit, therefore helping companies with their globalization efforts is only for the benefit for the company. Some people, viewing from a financial standpoint, consider that companies are making overseas investment with Taiwan's resources. If the money is not transferred back to Taiwan afterwards, the government cannot even tax on the investment earnings.

However, most people fail to consider that globalization is an extension of national power and serves as the strength for companies to develop on a long-term basis.

I always believed that if the government can conceive a way that allows companies to make profit under the government's policy, the companies will naturally want to stay in Taiwan. If there are any companies that are good in taxes evasion that no government in the world can catch them, it will have no impact on Taiwan's competitiveness at all, as none of the countries worldwide can enjoy the benefit. However, there must be a headquarters for every company. The reason Acer is headquartered in Taiwan is because we can better maintain our competitiveness in this country. If Acer could exist without our government, we would not have decided to make the headquarters in Taiwan.

In fact, the government can make the companies stay and prosper through various policies and measures. For instance, the implementation of investment-encouraging policies, though reducing the government's income, makes the assets of all companies public. The profit of companies does not have to be taxed but can be reverted to stocks. The shareholders

who sell the stock afterwards will still be taxed. Even though the stockholders do not sell their stock during their lifetimes, the government will still tax on the legacy. In other words, no one will be able to evade the tax.

As long as the government is patient to conceive ways to make the company stay, it will be the winner eventually.

I think the reason that government is concerned about a company's globalization is because they fail to consider the concept of "human beings are basically good in nature" In other words, if the CEO of a company thinks little of his employees, the level of the company will not be high either. With similar reasoning, if the government treats its people with low-level consideration, the people will inevitably become low in level.

The Impact of Misunderstanding

In the early '90s, many media representatives as well as government agencies tended to compare the operating performance of some OEM manufacturers to Acer's brand name and international business results. They criticized that Acer had too many accounts receivables and inventory turnover was too slow, and did not consider that brand name business and OEM business are two different business models. They also did not realize that the perceived slow turnover rate was a result of increased added value and the extension of logistics pipelines.

Most agonizing was that some media claimed Acer had the worst productivity, having derived such a conclusion by wrongly dividing the revenues of Acer Inc. by the headcount of The Acer Group. At that conjunction, due to Acer's bad performance based on revenue per person, most media made exaggerated reports based on any clues they could secure. It was impossible for us to clarify everything everytime, as it would only arouse unnecessary concerns or further conjectures.

During that period, some foreign media reported that since the Taiwan government did not want Acer to go bankrupt, it assisted Acer to tide over the difficulties. In fact, the concurrent Prime Minister Hou, Po-Tsun had inquired whether Acer needed governmental help through Mr. Yung Kuo, the chairman of III (Institute for Information Industry). We were appreciative of the government's offer, but we had found other solutions.

Changing to another viewpoint, for companies to solve its difficulties under the current political environment, they had better depend on themselves. It is because even if the ministers had given their verbal commitment, once the real problem occurs, it involves the political responsibility of the officers in-charge; hence every step has to be prudently taken care of. When all the procedures are completed, it is usually too late for the company.

Therefore, companies would rather adopt normal trade measures, such as getting bank loans, instead of resorting to political measures. As Acer adopted a clear and transparent procedure, banks such as the Taiwan's Chiao-Tung Bank and Taiwan Bank have rendered their full support to Acer. The Chiao-Tung Bank is the leader of the investment banks in Taiwan, and their decision, of course, will influence the decision of other banks. At that time, there were presidents of foreign banks calling the late chairman of Chiao-Tung Bank, Mr. Liang, Kuo-Shu, and asking about the bank's attitude. Chairman Liang expressed his full support to Acer without any reservation, which influenced some of the foreign banks to join in and help with Acer's re-engineering efforts. (Here I would like to express my sincere gratitude to this deceased banker.)

Benefit of the "Local Touch" Strategy

It may now be understandable that Acer had to adopt a decentralized management model so that the manufacturing-oriented SBUs and distribution-oriented RBUs could each maintain independent operations. Only by this way do we not have to explain or argue about whether our efficiency is good enough. We are not afraid that Acer is compared to other companies as every one of our strategic business units can be compared with other companies, and excel.

Up to this point, everyone may be able to understand that as companies are facing various obstacles in overseas investments and the management in overseas operations is complicated, Acer's adoption of the "global brand, local touch" concept as well as our pursuit of local shareholder majority are to solve the multiple issues of capital teletransfer to overseas, a sense of belonging for overseas executives, as well as the brand name image.

Take a look at Taiwan's experience in foreign capital injection. We used to have high expectations towards Taiwan's auto and home appliances industries. Unfortunately, most Taiwan partners were restricted by their Japanese counterparts and were always unable to share the latest technology and make any inroads into the international marketplace. While this is an unpleasant result for us, we do not want to do the same to others. While developing markets in the third world, we have to realize that they also want their countries to become strong and competitive. Hence, Acer does not want these countries to go through the pain that Taiwan companies have experienced.

Besides making progress in the third world countries, Acer also wishes to make inroads in developed countries. If we successfully become a local company, our competitors in the local market will have no advantage against Acer by attacking the MIT (Made in Taiwan) quality in their advertisements as they used to do.

Moreover, this method will enable us to penetrate protective market barriers. Three years ago when Acer began to develop the Korean market, there was one Korean company that came to buy products from Acer. The executive repeatedly asked that we keep this confidential because, in Korea, people would feel pressured if they drive a foreign-made car. Similarly, if they learned that this company bought Taiwan-made products, the company would be in trouble. If Acer can become a local company through local partnership, we will not need to conduct business secretly.

I always believe that Taiwan should not follow the globalization models established by the Europeans, Americans, or the Japanese. If we follow their footsteps, we will only become a second- or third-class company.

However this strategy requires an important prerequisite. The corporate leaders must be willing to delegate and share, otherwise the goal can never be reached. However I believe this way definitely can work out.

Adjusting the State of Mind for Globalization

After experiencing many years of ups and downs in globalization, my advice for other business associates is not to be hasty. To accumulate strength of globalization, human resources is the most important

ingredient. As Taiwan's economy is basically export-oriented, there is an unmet demand for marketing talents. Hence companies have to spend time learning and developing human resources. As the work of globalization is a continuous task, companies may embark from an earlier stage and learn from mistakes.

Next, a company cannot consider the setup of manufacturing facilities in Mainland China and Southeast Asia as an implementation of globalization. After all, manufacturing is more internal-oriented, simple and easy to control. To succeed in real international marketing requires a much more comprehensive strategy.

There are many successful overseas manufacturing bases set up by Taiwan companies. However there are many failure examples of international marketing in Taiwan. Proton was able to recover from its U.S. loss through the support of its family. Copam's inventory in Europe, however, dragged down the whole company. Both companies had stable foundations in Taiwan prior to their problems.

A lot of room still exists for Taiwan to go global. I personally have two viewpoints to share.

Whenever I participate in international conferences overseas, I find lots of entrepreneurs from other countries in attendance. Even companies from Southeast Asian countries whose economic strength falls far behind Taiwan are no exception. However there are only a very few from Taiwan. Although Taiwan is boycotted in some international political bodies for political reasons, we should not confine ourselves and refrain from attending such economic activities.

Further, while Taiwan is striving to become the Asia-Pacific Regional Operation Center, it is difficult to find a presentable meeting place for a large international conference. Every year Acer holds worldwide distributors meeting with more than one thousand participants from around the world. However we fail to find a qualified conference venue which can accommodate 1000 people together, or even find a hotel for these people to dine together.

On the other hand, Taiwan is also in an inferior position in terms of language. Countries like Singapore, Hong Kong, the Philippines or Malaysia used to be British or American colonies, hence English is quite popular. Comparatively, fewer international conferences take place in Taiwan than other Southeast Asian countries. Entrepreneurs have less

opportunity to appear in domestic international conferences, hence their willingness and opportunity to attend international conferences is decreased.

I believe Taiwan is qualified and has to embark on globalization as our territory is restricted; only outward development can sustain our economic development. Regardless of whether it is a company or a country, globalization not only requires a strong will but also an appropriate environment. Since globalization is worth our effort, why don't we start to make long-term investments for the future?

*Chapter 7***Comments by Stan Shih at Year 2004**

- Acer adopted a few key strategies, such as “global brand, local touch” and on-site IPO, in the first re-engineering to conquer the internationalization risk. We gained the initial success. However, as the global competition of IT industries became enhanced, our localized business units became non-competitive due to small scale. We then unlisted the subsidiaries in Singapore and Mexico and consolidated SBU and RBU into GBU, by which actions the forever conflicts of internal transfer pricing ceased. After the second re-engineering, new Acer gave up the manufacturing and the whole global Acer had only one profit center. We thus could concentrate on the competitions in the markets. (Please refer to Chapter 1 “The Second Re-engineering in Acer” in “Millennium Transformation—Change Management of New Acer”.)

- Two key issues in the second re-engineering were inventory management and effective control of overhead cost. We used a new channel business model to replace the original fast-food business model and had resolved the inventory problem; while the overhead cost has been effectively controlled based on a concept of global business unit. (Please refer to Chapter 1 “The Second Re-engineering in Acer” in “Millennium Transformation—Change Management of New Acer”.)

Chapter 8

Long Term Investment – Sow in Tears, Reap in Joy

There were three major investments in Acer history: the Altos acquisition mentioned earlier, the TI-Acer joint venture and the Acer Lungtan housing project. The latter two projects were initiated almost at the same time in 1989. The first two projects became the two businesses that achieved the fastest growth within Acer, while the housing project remains the only one that has not enjoyed returns so far.

This difference in results can be attributed to the fact that technology is Acer's core business, not real estate. In further reviewing the policy and development background, the process is so complicated that it can be considered as a microcosm of Taiwan's long-term investment environment.

- Straight thinking:** Buying an office building in high-priced areas prevents asset depreciation and serves as a basis for long-term corporate development.
- Reverse thinking:** Such purchase is a burden for corporate development.
- Thinking logic:** While the pricing of the asset is high, the cost is high as well. Its flexibility in use and management is likewise limited, which may impact the company competitiveness.

In a highly congested place like Taiwan, space is always a controversial subject. The general public must work all their lives to buy a house. Considering future expansion, corporations also have to search for an appropriate location for long-term development. Under such circumstances, Acer headquarters has moved 28 times during the past 20 years. To provide our employees with a safer and more comfortable living environment, Acer decided to get involved in the real estate business.

For Acer, the housing plan was purely by chance. When Acer went public in Taiwan, it was a time when the stock market shot up sky high. As the bubble economy further expanded, many stock market investors were concerned that they would become the last to catch up with the "gold-rush." Those who did not invest in stocks found their wealth depreciating day by day. Acer employees, with stocks in hand, naturally felt the need to manage their finance, making their investment policy more aggressive and bold. Some colleagues sold stocks to start their own businesses; others invested in other businesses. The stock market fervor was accompanied by soaring land prices. Hence some colleagues also began to invest in real estate or take actions to improve their quality of life.

At that time, it was popular among people working in Taiwan's famous high-tech zone, the Hsinchu Science-based Industrial Park, to purchase a piece of land together and have the houses built by contractors. Some of our employees also took the same action.

From the company's standpoint, we certainly hoped that our employees would not be distracted by such plans. On the other hand, the huge capital and complicated procedure involved in such real estate deals were not something a small group of Acer employees could handle on their own. Hence, the company decided to take a controlling role in organizing the Acer housing plan. More importantly, since the company had more resources, it had a greater chance of success.

Looking back, most people underestimated the difficulties in such an undertaking. Deeply rooted in the minds of most Taiwanese is the notion that construction is a business that always turns in big profits. As the real estate business limped into depression, it is rare for people to want to build their own houses nowadays.

When Acer decided to proceed with the housing plan, we had decided to move the company headquarters to Lungtan. Therefore, it was natural that the housing plan was located in the same area. Lungtan, geographically speaking, is between Taipei and Hsinchu, and is about an hour drive from each city. It is along the route of the second freeway still under construction and land prices then were still acceptable. Later on, we found a tract of land and estimated there should be no problem in pursuing the housing project. But not till we really got involved did we discover things were much more complicated than we thought.

Buying Land Properties - More Complex Than Expected

Those who have engaged in land development will agree that when a piece of land is not getting any offer, the price does not appreciate. However, when potential buyers show interest, the price goes up immediately.

Next, since the land was owned collectively by many people at the same time, it was always difficult to acquire land of the right size for our need. We were forced to buy a bigger piece than necessary in order to obtain a complete tract of land.

The whole negotiation process went through various obstacles. We did not get to buy all the land in the end. Some landowners agreed to offer land only under a joint-development basis.

During the negotiation process, the stock market dropped drastically from its peak. Not only did the company's working capital become tight, employees also faced the same problem. As employees had a fixed share of the budget, the company had to shoulder a portion that was by then almost five times more than the original plan, which amounted to NT\$2 billion. The huge investment became a big burden to the company's operation.

At the start, 600 employees participated in the housing plan. As it was delayed for too long and the headquarters was moved back to Taipei, more than half of the participants backed out.

Fortunately, the first-phase of land clearing was completed, which should enable us to begin housing construction in mid-1996. Seeing our colleagues get actively involved in designing their ideal homes have made our efforts over the years pay off. The second-phase construction, still under planning, will be combined with the residential area, the R&D center, and the educational center of the first phase. Together, the whole area is named the "Acer Multi-Function Industrial Park."

The reason to promote such a plan is the fast expansion of the Group during the last two years. Our original factory space is no longer sufficient as well. The Acer housing project has helped to provide a solution for Acer's expansion problem besides offering a comfortable living environment for employees.

It has only been three years since we sold our office site in Lungtan plus factory space in the Hsinchu Science Park to alleviate our cash

pressure. The drastic change in the overall environment was totally beyond our imagination.

Wanting to Live in Taipei? Not easy!

During the first few years, we moved our office location more than twenty times due to business expansion. However, we did not have a choice due to insufficient cash and we could not afford to buy an office. The only solution was to move constantly. Since we were still small, we were able to confine movement within eastern Taipei. Moreover, moving represents growth, which is a joy. Therefore, we always moved our offices as if we were celebrating achievements.

However, as Acer grew, it became inconvenient to move all the time. In 1984, Mr. Glyn Ing became one of Acer's investors. As he was in the construction business, he was kind enough to help us look for an appropriate office site. However, it was not easy to find a suitable place in Taipei that we could afford. We looked at numerous places in the Taipei suburbs as well, but none of them could fit our needs.

After clearing various obstacles, we purchased a 14-hectare piece of land in Lungtan in 1988 from a textile company that already moved their operations overseas. It would serve as Acer's worldwide headquarters. Besides, we also purchased half of a to-be-completed 25-story office building in Hsih-Chi, a Taipei suburb, as our Taipei office. Meanwhile, our factory in the Hsinchu Science Park was also undergoing expansion. These additional spaces would serve our needs for the next ten years.

However, construction of the second freeway was delayed which made transportation to and from Taipei very difficult. Recruitment of personnel also suffered. Worst, the company did not grow as fast as expected. The extra office and factory space, on the contrary, became an operational burden. To meet cash flow needs, we had to sell idle assets.

Selling the Lungtan Headquarters

At around the same time, I went to Switzerland to visit Mr. K.Y. Lee, president of Acer Peripherals, Inc. (API), who was then taking a short-term course in the renowned IMD Institute. He suggested moving the headquarters to the Acer housing project site. Suddenly, the

advantages of selling the headquarters came to mind. Our headquarters was only a few kilometers from the site of the Acer housing plan. However, as it was along a major road and was part of the city plan, its price was four times that of the Acer housing plan. Also, since we had simply renovated the old textile factory to turn it into an office site, it was neither ideal nor adequate for our long-term needs. That is to say, if Acer was to build a new office building, it would make better sense to find a cheaper place.

After further considerations, we figured that since we still had a base in Hsih-Chi, selling the headquarters site would not force our back to the wall again. We originally estimated that we would need to add more than 10,000 white-collar workers to engage in high added-value product development. Hence, besides the facilities planned in Lungtan and Hsinchu, Hsih-Chi would house a batch of people working in Taipei. We never thought that the computer industry would turn into a low-margin business and that the personnel required would only become a fourth of the original to do the same business volume. Therefore, we decided to move the headquarters back to Taipei and rent office buildings on a short-term basis until the Hsih-Chi building is completed.

As the decision was made promptly and the timing was good, the process and price were satisfactory. It also injected the much needed cash flow. Some people often said that the Lungtan headquarters created a lot of commute troubles for our employees resulting in a high turnover rate. But it also became a great contribution to the company at a critical time.

After we sold the Lungtan headquarters, we also decided to sell a portion of our factory in the Hsinchu Science Park. The purpose, on one hand, was to accumulate long-term capital. On the other hand, space utilization became more efficient after our re-engineering efforts; hence, the expanded space remained idle. The extra factory space was later sold to MAG, a monitor manufacturer.

In less than two years since we sold these properties, Acer grew 300% and the space left was no longer enough. Less than three months after we sold the factory, the situation started changing, but there was no use to regret the decision.

There are numerous to-do lists for companies. However, under the practical environment there are not too many choices. If the companies are too insistent on their future ideals and hesitant about solving the pressing

problems, they might go bankrupt in the end.

Man Proposes, God Disposes

After selling the idle assets, our alternatives suddenly became wider. Many people may think that we lacked vision in our sale of these properties, but I don't think so. For a corporation, many decisions cannot be regretted. But some decisions can be changed. Though it may cause a waste of resources at times, we cannot stay regretful about the losses. Instead, we have to look for better ways to minimize the loss.

Take TI-Acer as an example. When TI-Acer was established, we rented ten hectares of land from the Hsinchu Science Park in a single deal. The first phase of the construction required only about three hectares. However, we expanded the size to six hectares on purpose, with half of the facility left unused. Though the semiconductor market was at its bottom, we continued to cultivate talent and increase the production yield rate. But we remained uncertain about when we could turn losses into profit.

The world is unpredictable. In 1992, the plastic resin plant of Sumitomo exploded, causing an immediate product shortage and higher prices. TI-Acer's business soon began to prosper. Coupled with the aggressive growth of the PC market at the same time, demand for memory continued to grow. Hence, the semiconductor market deviated from its historical prosperity cycle of four years at a time.

At that time, our minds went on a roller coaster ride during the decision-making process. In order not to miss any opportunities, we had to evaluate and adjust to more aggressive strategies from time to time. As we made more money and further lowered cost, we became more capable of handling risks.

With rapid expansion, the originally unused portion of the facility quickly became TI-Acer's 8-inch wafer plant (the plant IB). Generally, to build a plant with similar size requires more than one year. As the construction process was saved, although TI-Acer engaged in the 8-inch wafer plant later than other semiconductor companies, we were able to enter volume production quickly and achieve profitability immediately in 1995.

During this time frame, TI-Acer made two decisions which did not conform to my principle. First, TI-Acer spent tens of millions to build a very sturdy temporary office and tore it down two years later to build the factory. As we had to grasp the expansion timing and the office space also had to be allocated for the expansion, it was indeed a waste. But considering the potential income, it was a decision that we had to make.

Moreover, TI-Acer spent more than US\$22 million to build a steel-based parking structure which could accommodate nearly 1000 cars. I asked them why not use reinforced concrete at a lower cost. They said the cost difference was not much but considerable building time could be saved. The original parking structure has been torn down to build the phase II fab.

Reviewing these two decisions, can we say the management team was wasteful and lacking in vision? I don't think that's fair. All we can say is that as we are unable to foresee the future, we can only make conservative decisions and adjust when necessary. Especially in the volatile high-tech industry, we need to have long-term vision towards the utilization of land resources, or any resource for that matter. And we also have to maintain the flexibility to make adjustments.

Making Acer Colleagues Live and Work Comfortably

To cope with the fast growth of The Acer Group and the pressing need for land, Acer Peripherals, Inc. has built manufacturing facilities in Malaysia while Acer Inc. has invested in the Philippines' Subic Bay. However, 90 of our manufacturing is concentrated in Taiwan and there is no further land available for us in the Hsinchu Science-Based Industrial Park.

Obviously, to thoroughly utilize the current land resources we have, Acer's housing project land is the best alternative.

The "Multi-Function Industrial Park" which we are planning is not merely an industrial park. Our target is to build it into an economical, multi-facet, futuristic area suitable for both work and leisure. Here, high-tech facilities such as the information superhighway will be built in. Yet, it will also maintain a natural and spacious open area conducive for fostering a lively and creative atmosphere.

In this area, a recreational center and a business center will also be

developed, but not with too much hustle and bustle. Besides being a manufacturing center for high added-value industry and software industry, it also aims to attract the attention of artists, writers and creators. In the future, we are going to make it a prototype for 21st century work and recreation environment.

From the viewpoint of industrial development, the Hsinchu Science-Based Industrial Park is very successful. However, restricted by its current regulations, only 10% of the area can be used for residence. This means only a few people can live inside the Park. This has caused extremely heavy traffic around its vicinity. If the Science Park can be enlarged and the residency%age can be raised, problems will be solved. These are some of the issues we hope that the Acer Multi-Function Industrial Park can resolve effectively.

However, this does not mean that Acer intends to engage in the real estate business. As a member of the high-tech business, Acer will only engage in land development to meet our own needs. If it were not for the housing plan, Acer would not be involved in the real estate development. The development of the multi-function park is to create a higher added-value for our investment.

As a high-tech company, if we purchase land not for our own use but for speculative investment, the result will be detrimental. If a tract of land is purchased for our own use, surplus land area can be used for future expansion or sold if not needed.

Trap in Buying Land Properties

During the past few years, many computer companies in Taiwan suffered heavy losses in the real estate development business. The same situation was also true with Acer because all of us lacked the professional know-how. The reason for Acer to involve in the real estate business is not due to our "greed"; it is because buying a complete tract of land is very difficult in Taiwan. Otherwise, the Acer housing plan would have been confined in its original scope and would not have suffered so much.

It is inevitable that there are ups and downs in running a business; and the corporate leader should also include these ups and downs into the decision-making process. However, when a company encounters uncertain factors in its investment process such as the delayed completion of the

second freeway, the larger-than-planned purchase of land, and insufficient fund, should it give up? This is a very tough test.

With the same thinking logic, Acer also will not invest in the stock market. A very important characteristics of the IT industry is that if the investment direction is correct, we can obtain a large profit. At the same time, we are constantly faced with high risk due to the fast pace of change. Hence, we have to concentrate on the operation every day to manage and prevent risk.

Over ten years ago, Taiwan companies were enamored with the operation model of a diversified business. I was asked more than once why Acer did not diversify its operations. I still hold the same view today that the IT industry is just at its beginning, and so is Acer. As such, there is no reason to divert our attention, thereby reducing our chance of success. The profit of real estate or stocks is not for us to make. Profiting from the Lungtan land sale is only by sheer luck and is not to be expected. Furthermore, it can not be included into the decision-making process as a variable.

Of course, it may not be the same for other industries. Some industries, restrained by development space or due to its matured state, do not pose so many challenges. Executives consequently have more time to engage in other business investments. However, for high-tech enterprises, it is too costly to spend time and energy on investments other than our line of business.

Viewed from another angle, Acer's Lungtan headquarters and API's new plant were acquired from old textile plants. Many such traditional industries had been unable to maintain operations in Taiwan due to competitive pressure from lower-cost countries. After we bought them, the land could be used for higher added-value production and wealth creation. To prevent the limitation in land resources from weakening its competitiveness, countries with scarce and expensive land area like Taiwan have to develop high added-value industries such as computers and semiconductors.

For the semiconductor industry, a one-hectare area requires an investment of about US\$200 million, excluding the price of land. Due to depreciation, another \$200 million has to be invested every five to ten years in order to generate an annual revenue of \$200 million. For the PC industry, a one-hectare area will generate an annual revenue of \$400

million, which is about five to ten times what other industries can make on the same area. In fact, it offers the highest returns among all industries. For similar capital-intensive and high-return industries, even if the cost of land is high, its percentage in the total cost will not be too much.

In fact, for enterprises such as Samsung, Hyundai or Formosa Plastics, their purchase of land each time is usually several hundred hectares. With Acer's current business size of about US\$6 billion, it's surprising to know that we used less than twenty hectares of land. It would be interesting to know how much land these enterprises used when they were at the same size as Acer is today. If Taiwan is to effectively utilize the limited land resources, "high-tech island" is the direction worth planning for the long term.

Appreciate or Depreciate?

After the headquarters was moved back to Taipei, one block away from our old headquarters prior to the Lungtan move, our business turned prosperous. Some journalists mentioned that Taipei's Min Sheng East Road seemed to be a lucky site for Acer as we have always done well around this area. Why not buy an office building here?

I personally have no objection towards selecting an office location on the basis of feng shui? (literally meaning wind and water. It is an ancient Chinese art of picking good locations. Chinese believe that certain good locations will bring its inhabitants good fortune and luck). In fact, Acer's fastest growth period did not take place on Min Sheng East Road. More importantly, Acer never considered buying an office building in Taipei. From a "cost" point of view, as long as there is not much difference in commute time, it does not matter where the office is. It is not necessary to choose such an expensive office location.

Maybe some people think that buying office buildings can preserve the asset value of the company or it can even appreciate. But Acer never wants to make money from real estate development. In fact there is a view in the U.S. business that whenever a company begins to construct its own office building in the city center, it's about the time the company is going down. Whether it is a professional viewpoint or an asset's capital utilization, buying office buildings is not a good decision at any time.

The process of buying a headquarters is similar to what a Chinese proverb says, "Like drinking a cup of water, only the drinker knows whether it is cold or warm." What's fortunate is that Acer is always able to adhere to its major principles and remain flexible during the implementation process so that we are not stuck in this area. In fact, this has been Acer's operation style on long-term investments.

Disintegration from Marketing to Key Components

- Straight thinking:** To transform the structure of labor-intensive industries, we have to control the key component technology first.
- Reverse thinking:** To transform the structure of labor-intensive industries, we have to develop the marketing channels first.
- Thinking logic:** With the downstream (marketing) not channeled properly, the mid- and up-stream will be flooded; once marketing capability is established, products with better applications can be developed and stimulate investment on the up-up-stream.

Industry structure can be compared to a river. Upstream is like R&D and manufacturing of key components; midstream is product assembly; while downstream is the marketing. Taiwan enterprises started mostly from labor-intensive assembly industries, which is the midstream.

Excessive development in "midstream" industries has two outcomes: not enough key components from upstream often restrain the assembly business, and if downstream (marketing) is not channeled properly, finished products will flood the market and will be sold at cheap prices. When viewed from the value chain, the upper, mid, and downstream must achieve a balanced development.

For the three areas, the entry-barrier for midstream is lowest, added-value is low, and is highly volatile, which means today's premium products may be phased out tomorrow. In terms of marketing, once the brand name of a product is successfully built up, it will benefit other

products in the future. Also, once a corporation is equipped with R&D capability for certain key components, it can be utilized for the development of other products in the future. But for product processing or assembly, it is easy for new competitors to enter and profit will soon disappear. Hence, when other countries are able to take over the advantage by offering lower production costs, manufacturers will have to move to other countries with more competitive manufacturing cost or close down their operations.

This is the reason Acer takes the backward disintegration approach -- to build up our marketing capability first. With marketing capability, we will be able to understand reaction from the market immediately, which in turn will help lower the production and investment risks in the mid- and upper stream, as well as help us develop more applicable products.

Entering the Semiconductor Industry

After the establishment of our marketing and manufacturing systems, in order to pursue an overall balanced development, Acer started to move upstream into the semiconductor field. First, we established Acer Laboratories, Inc. (ALI) to focus on the semiconductor design business. In 1989, Acer formed a DRAM joint venture, TI-Acer, with Texas Instruments.

There are three characteristics for any key component manufacturing: a high-level of technology, capital-intensive, and high risks. However, its high risks are tied to the processing and marketing in both midstream and downstream. The risks are lower if capital, technology, and market are controlled at the same time. In the semiconductor industry, the microprocessor, due to design difficulties and intellectual property protection, has formed a high entry-barrier. The DRAM industry, which I labeled as a "one-billion dollar club" in 1989, has now become a "ten-billion dollar club." It has become not just a highly capital-intensive industry, but is also considered the product with the most complicated manufacturing process and highest risk in the market. Intel, as the world's premier microprocessor giant, also stumbled in the DRAM business.

Before the establishment of TI-Acer, there were no DRAM manufacturers in Taiwan. The two current semiconductor giants in Taiwan — UMC and TSMC were established with involvement from the

Taiwan government. TI-Acer was the biggest semiconductor fab in Taiwan invested by the private sector, and what it took on was the most difficult DRAM production. With Acer's usual concern with risks, we had to have sufficient preparation to minimize risk.

Acer signed a technology transfer agreement with TI to secure the technology resources. For market, TI and Acer had been able to consume the total capacity. Meanwhile, the unprecedented prosperity in the stock market also helped to provide much needed capital.

Controversy in Developing Key Components

The advocacy for developing semiconductors in Taiwan started around 1977 when several experts came back from the U.S. to promote LSI. At that time, I did not agree with this. Taiwan, then, did not have enough capital and our capability in controlling the market was also insufficient. Moreover, Taiwan was not mature enough in terms of designing and manufacturing capabilities. I personally had no opinion if the government was to allocate budget to conduct research, but it would be too early for the private sector to make such a huge investment.

At the same time, under the influence of the academic field, Taiwan's business circles and media held the view that Taiwan's development was restrained as we had no key components. Hence they greatly advocated the development of key components.

However, the biggest difference between key-component investment and assembly or marketing is that the former has very little flexibility. In marketing, we may turn to sell product B if product A does not sell well. For processing and assembly, if the profit of assembling calculators gets slim, we may turn to the assembly of telephone sets. However, once we engage in the development of any key component, whether semiconductors or LCDs, the lead-time required is more than ten years and the decision cannot be changed. In view of Taiwan's immature environment, should we invest our limited resources into such high-risk business simply because we had no key components? If we failed, we would end up with nothing, even less. Even if we succeeded, we still would not know where the market was. What would be our purpose and benefit for such investments?

If our motive for taking up such a long-term and heavy burden is due to concerns that the lack of key components in certain stages will reduce our profit, this is not necessarily the only solution. We have to think of the priority for the utilization of available resources. At that time, assembly business was able to bring us the most benefit without having to worry about risk or survival. Most importantly, it would create a ready market for key components in the future.

During that period, I often publicly expressed my views to those who advocated development of semiconductors in Taiwan: "If Taiwan has to control key components to survive, obviously Taiwan should not have succeeded in the petrochemical industry as we do not have oil." The fact is that countries without oil fields can still successfully develop a petrochemical industry.

This is the basic concept of free trade and global cooperation. We should do our best to make the money we are capable of making. If we cannot develop the raw material industry within a short term, then we have to pay a higher price for it even if we are unwilling. No matter what our plans are, we have to make money from what we are good at, and buy those we need. This is the most effective way of doing business.

Today, it is proven that a vertical-integration strategic thinking (the intention of a company to engage in all lines of business) is already outdated. The world has entered an era of cooperation and disintegration. The failure of certain countries or corporations is due to their neglect of this reality, and a state of mind that wishes to succeed by controlling everything.

A company should try out new investments. However, what is more important is that there must be priority in conducting investments. Based on the level of difficulty, risks, and the company's resources, the company has to conduct a thorough survey, focus its strength, and proceed one step at a time, just like playing chess.

Investing in Quasel

I think the Taiwan government and some corporations have made considerable contributions to propel the semiconductor industry to where it is today. Its prosperous development far exceeds our expectations. Of

course, we have paid a lot of tuition along the way.

In 1980, the technology that the government introduced from RCA (Radio Corporation of America) had come into shape. Under the initiative of the government, Taiwan's first semiconductor company, United Microelectronics Corp. (UMC), was formed. It was a spin-off of ITRI's ERSO. During its start-up phase, UMC took on phased-out products from foreign semiconductor manufacturers, such as electronic watches, music cards, and telephone set ICs. These products, low-end in technology and no longer competitive if made in developed countries, generated a lot of profit for UMC.

The success of UMC encouraged the government to make more aggressive investments in semiconductors. Taiwan's semiconductor industry thus entered its second phase of development.

Starting in 1983, a few semiconductor experts who originally worked in the Silicon Valley returned to Taiwan to start their own business. Companies such as Quasel, Mosel and Vitalic were set up. Quasel went bankrupt. The other two did not succeed individually but merged and to become Mosel-Vitalic, a successful firm now.

The first problem they encountered was a source for capital. Predictably, as these teams just came back from abroad, their ability to raise capital was therefore limited. Take Mosel and Vitalic for example. Since their capital was not enough, they confined their business to R&D, and subcontracted manufacturing to Japanese and Korean companies. Quasel was the only company that had a stronger ability to raise capital (Ronald Chwang, now Acer America's president, was its chief engineer). Its shareholders included Mr. Ing, Chiao-Tung Bank, Central Investment Corp., China Development Corp. (CDC), the development fund of the Legislative Yuan and Acer's affiliate, Multiventure Investment Corp., as well as investors from the U.S. As capital was abundant, they engaged in the research and manufacture of DRAM product.

The change from our earlier objection to investments in semiconductors to our participation in Quasel was due to the fact that industry conditions had become more conducive. Also, since Mr. Glyn Ing invested in Acer in 1984, our capability to handle risks also improved. Mr. Ing was an entrepreneur who had high expectations towards the development of Taiwan's high-tech industry. He was happy to see young men dedicated to upgrading Taiwan's industry. Although he did not

know much about semiconductors, Acer was able to take its first step into semiconductors due to his full support.

Though it had acquired more capital, Quasel could only afford to buy half of the required advanced equipment. To begin production quickly, Quasel cooperated with UMC by installing its equipment in UMC and also borrowing part of UMC's facilities.

Remembering Painful Lessons in Order to Start Anew

However, Quasel suffered from a lot of things. The production process was not stable, the design was changed continuously and capital was drained. As the loss got bigger, the company was unable to maintain its operation and closed down.

Vitalic and Mosel, on the contrary, were able to merge and survive due to their lower operating costs.

When these semiconductor manufacturers ran into operation difficulties, they continuously asked the government for support. This gave an idea to Mr. Morris Chang, then the president of ITRI. He conceived the idea of setting up a fab to do manufacturing for these companies so that they did not have to worry about the huge cash outlay and associated production risks.

This facilitated the formation of the Taiwan Semiconductor Manufacturing Company (TSMC). The establishment of TSMC, however, did not serve the design companies it originally set out to help. On the contrary, it took on manufacturing work for some U.S. semiconductor manufacturers and Taiwan semiconductor design companies. Though TSMC did not serve its original purpose, it has maintained a very successful operation.

I believe many people remember that the reason why the Taiwan government set up the Hsinchu Science-based Industrial Park in 1980 was to attract technology transfers from foreign high-tech companies. The first target was Wang Laboratories, followed by Wyse and others.

However, the result was not as good as expected. Unexpectedly, it was local enterprises such as UMC and Acer that have achieved tangible results within the Park.

After our setback in the Quasel investment, Acer's semiconductor business set sail again with TI-Acer. This was not the first time that Acer

reenters a field where it previously failed.

In fact, failures are inevitable along the process of realizing our ideals. It can be attributed to insufficient capability or immature environment. However, we can also consider it an opportunity to nurture our capability in grasping the right timing in the future.

However, not all situations remain the same. For example, after two years of R&D efforts, Acer went full speed and successfully developed the world's first RISC PC in 1993. But it suffered from unexpected market impediments. So, when the world was pursuing the development of PowerPC with fervor in 1994, Acer chose not to take action. Because of this, Acer was able to concentrate on Pentium products and achieved high growth.

Strategic Alliance with Texas Instruments

With an aggressive but prudent attitude, Acer went into the DRAM business again in 1989. Our participation in Quasel was only as an investor, but in TI-Acer, we are the driving force and the major shareholder. I consulted our board of directors repeatedly to make sure we had their full support. In my view, DRAM was a risky investment but worth our effort. And while my share then was around 20%, I had to respect other shareholders' opinions.

After the capital was secured, we started to consider the technology issue. For this, I visited almost all Japanese manufacturers, including Toshiba, Sharp, Oki, etc. Among them, only Sharp was interested, but their strength was in ROM, not DRAM. Later we talked to TI and finalized the joint venture, TI-Acer, with 74% capital from Acer and 26% from TI. TI was to take charge of technology and marketing, and TI-Acer would be responsible for manufacturing.

To make sure TI was willing to transfer the most advanced technology, we adopted the cooperative model struck between TSMC and Philips, and gave TI the option to increase its shareholdings to 51% in the future. If we did not give our partners the chance to take a majority shareholding, they would not be motivated to provide technology unreservedly. It turned out that both Philips and TI gave up the idea of majority shareholdings.

Hence, based on our agreement, TI is obligated to transfer the most advanced technology to TI-Acer, and TI-Acer is entitled to share technology developed by any TI fabs around the world. TI agreed to this due to Acer's good record and image in protecting IPR.

Later, due to the unreserved technology transfer from TI, TI-Acer not only has the most advanced manufacturing technology in the world, it also engages in the R&D of special memories with TI's support. This has greatly contributed to uplifting Taiwan's semiconductor technology.

However, this was the result proven by practical actions afterwards. In the initial stage of TI-Acer investment, some people were suspicious about this cooperation.

Introducing Foreign Technologies

Some people thought that since over half of the capital was injected from Acer, this joint venture was only for TI's benefits. Some people even criticized that this cooperation did not help transfer technology at all and was an "unequal treaty." However, deep down in my heart I was very sure this joint venture would enable DRAM technology to take root in Taiwan.

Taiwan's IC packaging industry was initiated by Philips Taiwan, which also helped train a lot of talents for Taiwan's IC packaging industry. Rectifiers were initiated from General Electric, which cultivated Rectron as the biggest manufacturer in the world. PCB, under the cultivation of Ampex, brought along the prosperous development of local PCB manufacturers. These pioneering enterprises were 100% foreign owned, but the technologies transferred have benefited the whole country and industry. TI-Acer, on the other hand, was operated under carefully planned technology transfer and aggressive involvement in management by Acer; there was no reason why the technology could not take root in Taiwan.

Viewed from a different angle, even if TI-Acer is only profiting TI in the short term, would the talents TI-Acer cultivated only work for the benefits of TI all their lives? (Currently TI-Acer is planning to go public in Taiwan and become a local company. Hence the problem will no longer exist.)

After all the worries were cleared, we believe that the TI-Acer investment will be able to contribute to the overall industry and society.

After securing capital, technology and market, TI-Acer, like other semiconductor manufacturers, had to shorten learning curves, increase yield rate, reduce costs, as well as face unpredictable fluctuations in the market in order to generate profits as soon as possible.

Moving Forward in Difficulties

When TI-Acer was first established, the global DRAM market was still in recession, and the unit price was low. In view of TI-Acer's initial low production volume, it could not guarantee competitive manufacturing cost. The failure of Quasel also gave us a lesson that economy of scale was definitely the key for the survival of a semiconductor fab. Production efficiency cannot be enhanced if the production volume is not raised. As a new player in the semiconductor industry at a time of market recession, coupled with the high operating cost, the pressure we bore was unimaginable.

An even tougher problem was that TI-Acer's initial capital, NT\$3.1 billion, was planned based on the capital requirement for producing 1-Mbit memory chips. When the facility was completed, market needs had already shifted to 4-Mbit chips. Hence we were forced to enter the 4-Mbit memory market.

To raise the production volume and cope with the additional expenditure caused by product upgrades, TI-Acer had to increase capital to improve its financial structure.

As Acer was in a difficult stage and the DRAM market was still in a recession, it was tough to make capital injections immediately. We had to tighten our belts and look for other alternatives. Finally we issued NT\$900 million of special shares to secure long-term cash (upon expiry, the shares will be bought back by the original shareholders).

The method somewhat took advantage of the Taiwan government. According to the government's investment incentive policy, the issuance of special shares could enjoy a 30% tax reduction, with an average of 10% for three consecutive years. TI-Acer paid the investors 5% in interest every year. In total, the investors enjoyed 15% of investment returns every year. This way, TI-Acer was able to acquire low-cost capital, the investors were rewarded with reasonable profits, and the government achieved its goal of upgrading to the semiconductor industry, which is a win-win strategy for all.

As TI-Acer's capital was increased to about US\$150 million, credit lines from banks were increased as well, which helped to solve TI-Acer's financial problem in the initial stage.

Preparing for Long-Term Competition

Acer went through a series of financial challenges in the initial stage of investing in TI-Acer.

Originally, we had expected that Acer's annual profit could be utilized to cope with TI-Acer's capital requirement. However, as profit was not generated as expected, it became difficult for capital injection to take place with a reasonable price. Moreover, the high-cost capital would not be beneficial to our shareholders. When both expectations fell apart, huge capital pressure came upon Acer. To strengthen our financial structure, we took a bold decision to sell off some of our assets, including the transfer of 16% of TI-Acer shares to China Development Corp. (CDC).

Three years later, the explosion of Japan's Sumitomo plant resulted in fears that the DRAM supply could run out. The market price started to rise. Luckily, TI-Acer caught up with this development as its production volume and yield rate both reached satisfactory levels. By the beginning of 1993, TI-Acer turned to profitability earlier than expected. In fact, the real transformation success in Acer's business took place at the end of that year. Due to TI-Acer's profitability, outsiders began to regain their confidence in Acer. Not only did orders increase, we were also able to get more support in general.

With the TI-Acer cash dividend, we were able to buy back the special shares. In other words, although TI-Acer became profitable, the money in reality still remained with TI-Acer while Acer only reflected it on the financial book. Investments in key components do not generate returns in a short time. This is an important mindset a corporation should have when making such a decision.

On the other hand, when Acer improved its financial structure and regained profit on a large scale, we immediately took the timing to increase capital and issue new shares at a more reasonable price. For companies, long-term investment was originally intended for long-term development. However in turn they often become a burden for the company. The reasons are mostly factors concerning technology and

market. But for Taiwan companies, financial problems are seen more often. There are three levels to analyze the reasons why long-term investments may result in financial difficulties.

First, corporate leaders did not establish the understanding that "long-term investment must utilize long-term capital." Even today, many company owners still get loans from banks to establish new businesses using company stocks as mortgage. This is quite dangerous in reality. With stock prices fluctuating, the owners may over-estimate their financial capabilities when the market goes up, and may borrow more money and conduct business in a larger scale. As the stock price goes down and banks request for additional mortgages, the owners may be unable to handle the situation, causing both new and old businesses to suffer risks.

Second, the corporate leaders may have such understanding, but would not necessarily agree, and still wish to get by through luck.

Third, although the corporate leaders have understanding and agreement, the environment still is not mature. This is the situation that Acer encountered during that time frame. To maintain our core strength and protect investors' benefits at the same time, we had to opt for a capital-raising channel that had the lowest cost and risk. Therefore, even if the transfer price of TI-Acer stock was not as satisfactory as we expected, we still had to proceed before it was too late.

Strategy to Leverage Others Experience

TI-Acer is now finally in good shape. The fab IB that utilizes 8-inch wafers to produce 16Mbit DRAM has reached a high yield rate in volume production. Though its product is different from that of other Taiwan manufacturers, TI-Acer's productivity and yield rate tops the Taiwan record.

TI-Acer's success brought along Taiwan's fervor in the DRAM investment. Looking back, DRAM investment used to be a government initiative. Today, TI-Acer has completed the mission for the government, with an efficiency and result that's very encouraging.

However, even today, many business associates still think that TI-Acer does not have its own R&D capability. In fact, Acer does have its own human resources. Ronald Chwang, now president and CEO of Acer

America, is one of the best designers. There is no reason why we should not pay certain fees to TI. Also it does not mean having a self-owned R&D requires no cost on our part. Regardless of which is more feasible, at least we do not have to worry about IPR issues. Currently some Taiwan manufacturers can only ship products to a few select countries with no IPR issues. Others are troubled by lawsuits. These are the unseen burdens for the companies.

On the other hand, for those manufacturers engaged in self-designs, once they encounter any difficulties in the manufacturing process, a lot of time and resources have to be spent to solve the problems. Texas Instruments, however, has a lot of experiences in setting up fabs, and has accumulated considerable capability in solving technical issues. TI-Acer is entitled to enjoy all of these benefits. These are the "insurances" that we bought in advance.

It is also a result of Acer's "leverage" strategy. In Acer's early days as an agent for microprocessor companies in Taiwan, we learned about the technology and profited from it. Our technology was therefore better than Tatung and Teco which had invested a lot in R&D. The same strategy was utilized in TI-Acer which had helped us to cultivate more talent and accumulate technologies. While different from the development strategies of other companies, it is still too early to judge which strategy is more effective. But we would like to prove it with reality.

*Chapter 8***Comments by Stan Shih at Year 2004**

- Aspire Park is a long-term investment, originally designed for a plan of employee's residency. Acer was thus getting into a real estate business by accident. If this plan did not adopt the resources of a long-term investment, it would be trapped into the same hardship like most Taiwanese construction companies did in the past ten years. From our experiences, a corporate with plenty of resources must be careful in the real estate investment, since whose nature is not easy to turn-around the cash flow. For Acer, this investment has some initial result but ROI is not outstanding. We have done a role-model in creating an overall living environment. After more than ten years of planning and construction, Aspire Park has finished the residential area, research educational area, industrial area, natural reserves, and green leisure zone and become a community of combining residency, working, learning, and leisure, and also a community of emphasizing a diversified and balanced development.

- Back years while I wrote "Me Too Is Not My Style", it was the best performance timing for TI-Acer. After that, TI-Acer had continuously facing difficulties and kept expanding deficit. Later, TI-Acer was impacted by the drop of DRAM technology and business from TI. Acer then bought all TI's shares and built Acer Semiconductor. Acer aggressively pushed the transformation of Acer Semiconductor and then sold all the shares to TSMC to gain profits. This was an unexpected result. We did not reach the goal of lifting the positioning of Taiwanese key component manufacturing. Fortunately, our investment was profitable in the viewpoint of ROI. (Please refer to Chapter 2 "Phase Out the Semiconductor Businesses" in " Millennium Transformation—Change Management of New Acer".)

PART THREE

MARCHING ACER INTO A NEW ERA

Chapter 9

Paradigm Shift in the Information Technology Industry

The PC industry just celebrated its 14th birthday in 1995, and Taiwan has quietly become the world third largest IT hub. Shortly before that, IBM spent US\$8 billion on layoffs and restructuring, and AT&T accumulated billions in losses in its computer business. Taiwan, on the other hand, has cornered a large share of the worldwide market of motherboard, monitors, and other peripheral products. Taiwan has become the biggest beneficiary in the worldwide PC industry.

In mid-September 1995, I gave a speech at a supercomputing symposium in Taiwan. While discussing Taiwan's PC industry, I told the audience composed of representatives from different countries, "Taiwan computer manufacturers foray into the PC industry has given a lot of headaches to many old-time computer manufacturers. However, this is not the fault of Taiwanese manufacturers. We simply caught up with the rapid change of the industry, and at the same time, introduced speed and cost as our new competitive factors. This accelerated the deterioration of efficiency in these large corporations. That is to say, due to a change in the industry trend and the winning advantage that Taiwanese manufacturers possess, the traditional computer companies have revealed their shortcomings earlier. Today, Taiwan has achieved remarkable achievements in the PC industry. Someday, maybe supercomputers will enter every family home and become arcade game machines. By then, Taiwan manufacturers will get involved in the production of supercomputer as well to benefit mankind."

After my speech, a Fujitsu representative approached me and told me humorously, "I am that victim."

Interesting enough, while Multitech entered the PC industry with microprocessor production in the early 80s, some foreign computer companies in Taiwan thought we were only a "toy maker" and did not know anything about computers. They never imagined that a small company like Acer would grow into an industry powerhouse, start a

business transition in the industry, and develop a position in the industry which is no less than established companies.

Now we can tell these old-time computer manufacturing companies:
 “Your golden time has passed. It is now the time for personal computers.
 “ The Disintegration and Reorganization of the IT Industry

- Straight thinking:** To increase efficiency within the shortest time, a company has to reduce its workforce or simplify its working process in order to shorten the improvement timing.
- Reverse thinking:** To shorten the improvement timing within a company, one has to modify the thinking pattern and the organization structure first.
- Thinking logic:** To increase efficiency using the old structure, the improvement rate may reach only 20-30%; with a new model and new structure, the improvement effects can achieve several times better.

Nearing the end of the 20th century, a huge transition is taking place in all industries. The main driving force behind the transition is the talented people who are making valuable contributions to the progress of the world. In the past, education was the privilege of nobility. Only a limited group could possess knowledge and contribute to society. Today, due to the accessibility and almost universality of education, highly educated people are in different lines of business. Tempted by factors of capitalism, these people have tried their best to contribute their capability and wisdom. Other technologies developed to prevent criminal acts also have enhanced the development of the society. The moving force generated from such highly developed skills is an unstoppable trend.

With more and more people involved in the contribution and as the industrial world develops towards more diversification, the opportunities for economic development are further broadened. Transitions are taking place in various businesses, moving from the original vertical integration mode to a disintegration mode.

The vertical integration mode was a theory proposed by economists and market researchers after World War II to enhance volume production

and foster efficiency. After entering the '90s, the theory encountered a great challenge. First, it became apparent that a cumbersome hierarchical organization could slow down operational efficiency. Furthermore, due to the rapid changes in the market, such a hierarchical organization demonstrated the disadvantage of being slow to react to the market.

The typical industry of vertical integration, the auto industry, began to cut down its workforce. The national competitiveness of Japan, which had built much of its success on vertical integration, also began to decline. Companies in various industries began changing their corporate structures to move away from vertical integration. EDS, the computer system integrator, was spun off from General Motors to form an independent company. AT&T, the communications giant, was divided into seven companies. Sony, in order to break through its operational bottleneck which had lasted over long years, divided its group into 10 smaller businesses.

From this perspective, while pervasive education has led to the rise of disintegration mode, the organizational structure has also evolved from a hierarchical organization to a decentralized and delegated organizational structure. As a result of this evolution, the original organizational structure has undertaken a monumental adjustment. It is like the move from mainframes to personal computers in the corporate client-server structure.

Why is that?

There is limit as to how much a particular organization can increase its efficiency. Like traveling on the ground, there is always a speed limit regardless of the tools we use. If we want to exceed the limit, we will have to use airplanes. Similarly, to improve management efficiency, we cannot just toil under an old structure; instead, we have to change the organization structure. To change a structure, we have to employ new ways of thinking. If we use the old ways to make improvement, the best result is a 20 ~ 30% improvement. If we utilize new ways of thinking, the result can be an exponential increase in the original performance. The increase in efficiency, in this way, can match the pace of the market.

Take the PC industry as an example. In the past, gross margins were 50%. If an organization had ten employees and 40% of expense, the

average cost for each head count was 4%, and the net profit was 10%. After the gross margin drops to only 25%, if we wanted to maintain 5% of net profit, the cost for each employee remained at 4%, and the operating cost had to stay at 20%, the company would have to cut its headcount in half. That is why many companies have to lay off employees in order to survive.

In fact, when a company lays off 30%, or even only 10% of its workforce, it will be in a shaky position; not to mention cutting half of its employment. Moreover, reducing the workforce by half does not help the company's situation. If the company maintains the original structure, the remaining staff can only produce half of the original value, unless productivity is increased several times higher than the original.

Establishing a New Operational Philosophy

Companies often improve their productivity by reducing workforce or simplifying work procedures. In my opinion, this re-engineering level is low and cannot cope with time pressures.

Corporate re-engineering can be divided into several levels. The lowest level is to press for efficiency in the original procedure. For example, by increasing bonus or penalty. The second level is to simplify or improve procedures. The third is to change the organizational structure. The highest level is to establish a new business philosophy. With lower levels of re-engineering efforts, it is easier to show results but the effect is more difficult to sustain. For instance, production efficiency increases immediately once bonuses are increased. But employees quickly get used to the bonus or take it for granted, and the operating expenses are increased but the re-engineering effect disappears. For higher-level re-engineering, although the effect may not take place very soon, the effect can sustain for a long time.

Acer's re-engineering activity covers the three levels. First, the "fast-food" business model is utilized to conduct re-engineering of operational procedures. Second, the "client-server" structure is used to reorganize the operational structure. Third, the "global brand, local touch" strategy is the new operating philosophy, with the "local shareholder majority" as the central vision.

As a result of adopting the “fast-food” business model, Acer no longer works on system assembly in Taiwan, but concentrates on the manufacturing of key components. This “uniload” approach, which moves assembly to each local market, has improved Acer’s advantage in responsiveness and cost. However, if Acer adopts only this approach, while it is imitated by other manufacturers or changes should take place in the environment, Acer’s leading advantage will disappear. The client-server structure has allowed each business to become an independent and separate entity. Combined with the global vision of local shareholders holding a majority ownership interest, Acer’s cooperation with local partners enables us to compete successfully with the industry giants on a long-term basis. As we look back, the three strategies have matched the general direction of the disintegration mode.

Acer’s rebirth can be attributed to the huge increase in our productivity and profitability. Between 1991 and 1995, the average revenue per person in The Acer Group increased 2.5 times, but average salary did not increase (this was due to the addition of many low-wage workers in the overseas plants). The production output value in the Hsinchu plant also increased six times. Only by gaining a greater room for improvement can we generate greater competitiveness.

It is rare to find companies conducting re-engineering programs with improvement goals set at doubling or tripling the original figures. The results achieved were also far beyond our expectations. We had to adjust our goals upwards several times, and have accumulated impressive results after four years. I firmly believe that in the new IT age, speed and efficiency have to increase several folds in order to succeed in the new competitive landscape.

Hence, I have to say frankly that IBM’s re-engineering did not grasp the most important points as it continues to believe that vertical integration can compete against the unstoppable trend of disintegration. They have attracted the finest talent and have seemingly inexhaustible resources, and are dedicated to its corporate re-engineering effort. It is not fair to say that they did not do a good job. However, if they do not adopt a decentralized operational structure, the result will not be as effective as expected.

Viewing from another perspective, as the whole world moves toward the direction of democracy and localization, a company’s organization

structure also has to follow the hearts of its employees. This helps consolidate the strength of the organization and enable the companies to gain recognition in the communities they operate in. Acer's strategy of "no central decision-maker" adopted in 1995 also arises from this understanding.

A New IT Age

No one ever expected that the IT industry has moved so fast towards the disintegration mode. The fundamental reason should be attributed to IBM's decision to open the PC environment.

In fact, before the emergence of IT industry, the auto and home appliance industries were both mature and had established certain levels of industry standards. As information technology was a new industry and dominated by only a few corporations such as IBM, these corporations developed proprietary systems that made it hard for new companies to capture any market share. Had IBM not taken the open architecture approach, computers would not have become as pervasive and popular as they are today. Strictly speaking, open architecture is a trend and IBM's decision only made it transpire much faster in the IT industry. Only this approach can truly benefit the general public, create the highest investment efficiency, and facilitate the effective utilization of global resources.

It was a simple decision for IBM that brought huge influence to the industry, which I believe even the people behind it did not expect. Moreover, IBM could not have expected this decision to accelerate the industry's move from vertical integration to disintegration, and to have completely altered the industry and the world.

In the past, as there were only a few large IT companies around the world, the vertical integration system they established required huge investments and had high risks, hence they expected high rewards in return. On the other hand, since only relatively few professionals knew about computers, it was natural that they requested high compensation. The computer industry, consequently, became an industry for an elite few. However, IBM's initiation of the open architecture changed all that and brought about the popularity of personal computers. This once elitist industry has gradually transformed itself into a commoners' industry.

Millions of people are making contributions to the industry, including component vendors, distributors, and after-sales companies. We can say that in every procedure, there are many professionals dedicating their wisdom.

During the transformation, a new category of participants entered and helped changed the dimension of the industry. They are the professional computer media and publishers such as IDG and Ziff-Davis. These publishing companies, though less than 20 years old, are able to surpass highly diversified centennial publishing companies such as McGraw-Hill. They helped made computer knowledge widespread, increasing the number of professionals and end-users at a rapid speed.

Stimulated by the mass media, the number of professional computer users is quickly increasing. In the past, computer end-users were scarce, and professional users were even fewer. All services had to be provided by suppliers. Now, there are much more customers who know about computers better than manufacturers. They are capable of training themselves and designing software. Hence, customers have also become a part in establishing the industry's infrastructure. When I travel to the developing countries, I find there is only limited difference in knowledge between the local computer users and those in the U.S., the computer kingdom. Computers and customers have already broken away from the control of a few privileged manufacturers.

Therefore, if we are to think about the future direction of the computer industry based on previous industry environment, the solution derived will be inappropriate. Meanwhile, the participation of new members in the computer industry has also consolidated Intel and Microsoft's semi-monopolistic position today.

The Rise of Taiwan Players in the Niche Market

Intel and Microsoft's position today can be attributed to their strong capabilities in R&D and marketing. It is also a result derived from the unique industry environment propped up by all manufacturers and customers. One major driving force are the software companies. Thousands of application software are designed based on Intel microprocessors and Microsoft operating systems. They have become a huge collective system.

A more important driving force comes from consumers. In fact, the largest investor in the IT industry infrastructure is neither IBM and Compaq nor Intel and Microsoft, but the computer users. The largest price the customers have paid is not money. It is the time and effort they have invested in learning about computers that is the largest investment of the world. Why is it that the PowerPC, a cooperative result among IBM, Apple and Motorola, cannot replace the governing power of Intel? It is because their PowerPC investment is nothing compared to the huge investment made by the worldwide customers. Coupled with human nature of resisting change, the alliance of Intel and Microsoft has become an unshakable force.

The rise of Taiwan manufacturers, on the contrary, was not aided by any forces. It was achieved simply because the existing computer giants were unwilling to reconcile and give up their vested interests. Meanwhile, the numerous semiconductor manufacturers, software design houses and computer resellers were in need of services which Taiwan's small- and medium-sized key component manufacturers were able to quickly fulfill. If IBM and Compaq were willing to cooperate when Intel launched 486 and Pentium microprocessors, Taiwan's computer industry would not have been able to grasp the opportunity and achieve such fast growth.

The standardization of hardware and software makes system integration relatively easy. As such, the computer industry has entered a new IT age. One of the benefits it offers is that the risks are greatly reduced under the disintegration structure. Furthermore, under the disintegration mode, every member is able to make continuous and effective breakthroughs in their respective fields of specialty, with the operating efficiency also increased.

The arrival of the new IT age brought increasing entrepreneurial opportunities of niche markets for computer manufacturers. On the other hand, there is also brutal competition in which companies are eliminated if they are not able to become the top players in their respective field.

This is what I called "Go big or go home."

Great Potential for Personal Computers

The so-called "leading manufacturers" differ in essence in terms of hardware and software companies. For hardware companies, around ten

companies can simultaneously survive in the global market. But for software companies, only two to three companies can survive in each category since for software businesses to reach the necessary economy of scale, it is only necessary to duplicate diskette. The cost of copying diskettes is very low. Regardless of whether it is a software or a hardware company, if they are not able to take a leading position in terms of technology and size, the numerous new companies joining the competition only make the market smaller and effort wasted.

If we make a final evaluation on the first-round of PC development history, those old IT companies that were highly successful before the PC was created are mostly the losers in this stage. Heavy-weight companies such as IBM, Digital Equipment, Bull, AT&T, Siemens-Nixdorf, Olivetti, etc. have accumulated a total loss of over US\$10 billion (equal to Acer's total revenue for the past 20 years). Companies that were able to make impressive progress were mostly new companies such as Compaq, Dell, Gateway 2000 or Acer. Of course, not all the new companies are the winners. Although the total profit of new companies remain positive, if the profit of the old and new companies are combined, the PC industry is still a losing business. Even so, the popularity of PCs has benefited the enormous key component suppliers. Besides Intel and Microsoft, the DRAM industry in Japan and Korea and the Taiwan monitor manufacturers have all achieved high profit.

With the prospect that PCs will lead the world into an information industry by the 21st century, the frustration we have encountered is only an insignificant turning point during the long history. In the foreseeable future, the potential of personal computers is unlimited.

The business transition taking place in the computer industry has altered the future of all computer manufacturers. For non-IT companies, the impact is also significant. The transition is not confined to the computer industry alone; maybe it is taking place in your office silently.

New Era, New Vision

- Straight thinking:** A company long-term strategy is a secret weapon. It cannot be disclosed to outsiders.
- Reverse thinking:** A company long-term strategy should be made public as early as possible.

Thinking logic: Long-term strategy requires long-term efforts. If they are announced early to the public, it helps concentrate the company strength and achieve the goal.

For Taiwan companies, under the trend of disintegration, their room of development in the international market gets wider and their role becomes more important. Undoubtedly, Taiwan's most powerful competitiveness lies in the disintegrated network composed of the medium- and small-companies. When the integration mode was popular, the numerous small-to-medium sized companies hindered Taiwan's economic development. Today, it has become the future trend in the eyes of international marketers and economists. Taiwan's Commonwealth magazine calls such network the "amoebae organization."

The flexibility and efficiency of an "amoebae organization" has indeed created a leading advantage for Taiwan. However, as the network develops to its current status, it is about time its standard and level be uplifted and improved. I think Taiwan companies should improve toward the direction of "quality." The improvement of "quality" can be divided in two parts: the upgrade in business quality and the order of improvement. Besides upgrading the industry, we need to further understand our capability and positioning, and make effective utilization of resources.

Looking back on Taiwan's economic development in the past, its vitality and aggressiveness can definitely be recognized. However, due to the blind investment into the industry that one is not familiar with, it caused the loss of many investments. If the quality of a company is upgraded, it will find its core competence and reduce the resource waste and investment risk to a minimum.

On the other hand, the network of medium-to-small companies in Taiwan needs to fully utilize Taiwan's existing advantages and become part of the international disintegration network, instead of only doing the disintegration in Taiwan.

As a result, I think Taiwan's "amoebae organization" should transform to an "international and more systematic amoebae organization." That is to say, we need to sort out a more systematic organization with consensus from previous chaos so that our strength is not diminished in disorderly competition.

Viewed from another perspective, although Taiwan has established a solid foundation in its manufacturing capability, our control over market and application capability of new technologies is still weak. Since we do not have the strength to conquer the world, there is no reason to stand out and become enemies of others. The best strategy is to befriend them and become part of the international disintegration mode.

In fact, Taiwan's resources are limited and so are our alternatives. Since we are facing the trend of global disintegration, we will have to truthfully grow together with our friends all over the world.

If Taiwan companies befriend other international players, any global companies looking for strategic partners will not overlook Taiwan. They will even come to ally themselves with Taiwan companies when they feel threatened by other players. As such, the position of Taiwan becomes the "key minority." This way, Taiwan companies can grow and prosper together with our friends around the world under the international disintegration network.

Bringing Home Fresh Technology

To welcome the arrival of the new IT age, Acer combines its corporate quality and long-term operating advantage with the market requirement, and raises the strategy and mission of "third entrepreneurship": "Fresh technology enjoyed by everyone everywhere." The goal of this strategy is to make Acer a household brand name. This is Acer's "dragon dream" and the hope of our people.

Before this, Acer had its mission for the first and second entrepreneurship. Acer's first entrepreneurship in 1976 aimed to promote the application of microprocessor machines. The second entrepreneurship in 1986 was to build up the strength for globalization and brand name business. While reviewing these missions today, we are glad to have achieved a satisfactory result.

It contains several important concepts in the goal of Acer's third entrepreneurship: "fresh," "enjoy," "everyone," and "everywhere."

Why emphasize "fresh" technology instead of "new" technology? This is because much of the technology breakthroughs end up in high-failure rate due to various environmental factors, such as technological level, business size and whether it can convince customers to use new

technologies. As such, we do not have absolute confidence about new technology, and we are unwilling to make too much investment. We would rather wait until technology becomes mature before we quickly follow up (this is Acer's First-Follower Principle). We will make improvement on the technology and maintain it to stay "fresh."

Take the example of food. Delicious breads are those that are hot and just out of the oven; delicious fish are fresh fish. New kinds of bread and new species of fish may not be delicious, or may not be edible. In view of Acer's current R&D capability, we feel that it is impossible for us to maintain a long-lasting leading position in a new technology. On the other hand, a company cannot invest just for the sake of creating. It has to consider the interests of customers as well. New technology can be too expensive, immature, and cannot be enjoyed by everyone. On the contrary, a mature but fresh high-tech product is cheap and has a reliable quality. Everyone needs fresh air and food, but they are not expensive.

As a result, we believe "fresh" is better than "new." This long-term strategy is not only appealing to our customers, it is also a reminder to our colleagues that Acer will manufacture the most needed and most practical products for customers.

In fact, as early as when Acer began to develop the "fast-food" business mode, I often used the term "fresh" to explain the importance of speed and value of a product. At that time, the fresh computers produced in Taiwan became obsolete when they were shipped to Europe. We know that a unique characteristic of a fast-food store is to supply just-made food, and they throw away the food that has been on the rack for a period of time. Now, as Acer has developed the fast-food business model and SBUs are established as the "central kitchen" with professional manufacturing capability and economic scales, we have set up assembly facilities in more than 30 sites around the world. This is our strength upon which we can compete with others on the "freshness" of computers we deliver.

Combining the concept of "fresh" with "enjoy" demonstrates the product is not only practical and inexpensive, it is also a machine that is easy to use. The mission of creation is to allow everyone in the world to enjoy the convenience of technology. As an inventor and an engineer, one must do his best to create products that are easy to use and inexpensive. The responsibility of a company is to make continuous improvements, lower cost, and reflect the reduced cost back to customers. Of course, the

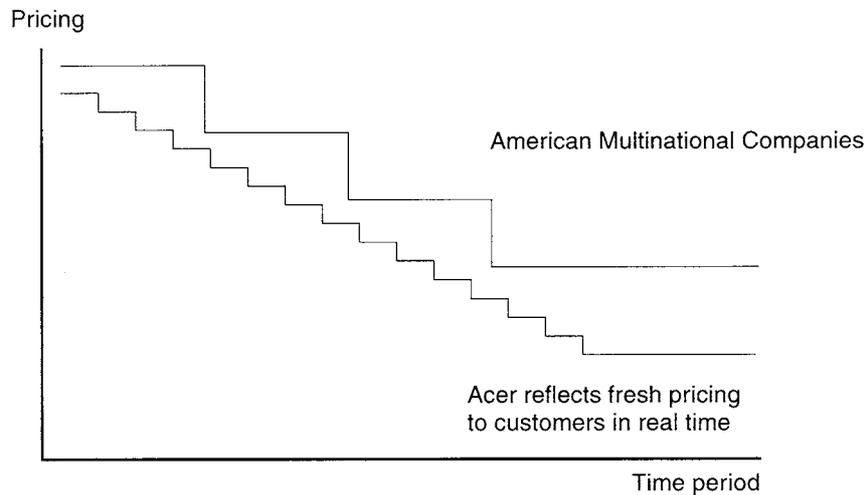
company is not sacrificing all its interests. Through this way, the company is also improving its corporate competitiveness.

By "everyone" and "everywhere," Acer wishes to apply fresh technologies all over the world. The more people to enjoy the technology, the greater contribution it has to the world. On the other hand, we want to clearly declare to the other third world countries that Taiwan used to suffer unfair treatment from the U.S. and Japanese enterprises that did not transfer the leading technology and sold us second-class inferior products. We want to tell the general public in the developing countries that Acer is everyone's friend and would not treat them as second-class citizens. Furthermore, by establishing strategic alliances, we want to tell the large companies that dumping no longer works in the developing countries.

Continuous Entrepreneurship

Starting from "fresh technology," Acer came up with another new concept: fresh pricing.

The marketing strategy of large companies is to reduce price significantly after a long period of time. Acer's strategy is to shorten the time period and have continuous price reduction on a shorter time interval. In other words, we are reflecting prices at any time and returning the reduced cost to our customers (see illustration below). From the illustration, consumers of part A are wasting money as they have paid a higher price. What is unfair to Acer is that the media attention always centers on the occasional price reduction of large companies, and wrongly questioned whether Acer has the competitiveness to cope with the marketing attack. In fact, we are the one taking the initiatives to attack, and that the response of large companies are behind us as they are forced to defend themselves.



Acer's "Fresh Pricing" Strategy

The concept of the "third start-up" is not only to appeal to our customers; we also hope to form a consensus among colleagues. As it takes about five to ten years to achieve the mission and establish the intended image and reputation, we have to set our goal as early as possible and organize the efforts of many people. This is why Acer never treats its strategy as a "secret weapon"; instead, we make it public as early as possible. Our goal is not to achieve it within a short time. While the outsiders are evaluating our plans, Acer has set out on its actions. When we achieve our goals and demonstrate the result, it is too late for others to imitate.

Already twenty years old in 1996, Acer continually raises the concept of "start-up" to ensure that the company can continue to maintain its entrepreneurship and sense of crisis. Meanwhile, we set a higher goal for another phase of corporate development. We want to remind our colleagues that there is still a long way to go before Acer becomes a first-class global company in the world. We are not yet entitled to enjoy or relax at this moment.

Comments by Stan Shih at Year 2004

- I proposed the theory of “Stan’s Smiling Curve” to illustrate the new tendency in 1992, at which time the information technology industries had started to dis-integrate into up-, mid-, and down-streams. This was different from the integrated PC business by those earlier computer companies. After the onset of dis-integration, PC industries have gone through many important changes, including a complete outsourcing model, the merger of Fujitsu and Siemens, and HP merged Compaq. Recently, some investors propose that do not invest the PC companies except Dell and Apple Computer, both whose positioning are exceeding a PC company. During the process of this industrial change, Acer has successfully repositioned. We gradually expand the product lines and enhance the IT service businesses, and have become an exceeding PC company. We were lucky to catch the earlier opportunity and have transformed into a branding and marketing service company.

Acer's Three Major Strategies

Acer three strategies, the "fast-food" business model to reengineer the work process; the "client-server" organizational structure to reengineer the organizational structure; and the new operational philosophy of "global brand, local touch" strategy, can be viewed from different angles.

We can view them as visionary, for the fast-food business model has matched the industry trend of global disintegration. We can also say they are not visionary because they were developed to cope with Ace's pressing crisis in the first place.

We can even say they are innovative as Acer is the first company to apply the computer client-server structure to its multinational management. We can also say they are not innovative as Acer has always maintained a decentralized management approach.

We can say they are modern as no other international companies resort to the idea of a "local shareholders majority and go public in the local market." We can also say they are not modern as we adopted similar approaches when Acer was first established.

However, they are the "prescriptions" for Acer to survive difficulties and remain healthy. To regain our competitiveness in speed and cost, we moved computer assembly to the local marketplace. To solve the problem of management capability in the overseas assembly sites, we have to rely on local talent and invite them to become shareholders. To establish an operational order for the decentralized operation sites all over the world, Acer established a set of structure to consolidate the various organizations.

They are also effective tools for Acer to develop a more prosperous future. Going public in each marketplace helps us concentrate the talent, capital resources and the cohesive force. The empowering "client-server" organizational structure makes each business unit strong and independent. The emulation of a fast-food business provides a future full of potential.

Following the industry trend and having each strategy closely associated with each other is the characteristics of Acer's strategy development.

Fast-Food Business Model

- Straight thinking:** A brand name product is naturally high-priced.
- Reverse thinking:** A famous-brand product, besides having fine quality, should also be inexpensive.
- Thinking logic:** A brand helps create a clear identity and trust among customers. In return, it helps the company to achieve economy of scale and reduce cost. Since cost is lower, price should be reduced to benefit the customers.

Before we discuss the “fast-food” business model, we have to briefly review the history when personal computers moved from a vertical integration mode to the disintegration mode.

IBM introduced the first personal computer in 1981, followed by Compaq in 1982, which opened the new era for IBM-compatible computers. In 1983, Acer introduced the first personal computer in Taiwan. Other manufacturers in Taiwan followed in 1984. Before 1986, the whole PC market was filled with system integrators only.

After 1986, professional motherboard manufacturers appeared. Among them the two major companies were Elite, established by Mr. Han-Ching Chen who used to work in Acer; and Mr. Ming Chien's First International Computers (FIC) which used to distribute system computers.

The emergence of motherboard manufacturers was fueled by the huge increase of IBM-compatible assemblers around the world. They are similar to the numerous no-brand computer manufacturers in Taiwan (the so-called “others” category). These companies imported standard motherboards, assembled them in systems, and sold the systems in the local market. We did not mind at first. But by 1991, these no-brand computers had already taken about 60 to 70% of market share in almost every market. Significantly, all the motherboards were supplied by the hundreds of motherboard manufacturers in Taiwan.

At that time, the development status of Taiwan motherboard manufacturers could be considered a mess. Aside from a few companies, the quality and compatibility of most others were not good, but they enjoyed a very strong momentum. Increasingly, we found the competition becoming more fierce. Our OEM business was declining as the products

were already months-old by the time they were delivered to overseas market. Our customers' competitiveness also deteriorated as a consequence. Acer also faced the problem of slim margins and stagnant market share.

Originally, Acer also produced motherboards for internal consumption. As a result, the cost was not competitive enough. At the same time, four R&D colleagues led by T.H. Tung left Acer and founded Asustek to focus on motherboard production. Acer's move into the motherboard market became inevitable.

After spending one year to communicate and form a consensus (see Chapter 6), we decided to promote motherboard sales in the market in 1992.

From then on, Taiwan became Acer's "central kitchen" that churn out components such as motherboards, housings and monitors. Meanwhile, each regional business unit became a fast-food store that assembles fresh PCs. With this arrangement, Acer's unique "fast-food" business model came into shape.

Moving Unload Overseas for Fast Assembly

The concept of a "fast-food" business model does not seem complicated; but it is not achieved easily. How do we help the overseas business unit take on the assembly work when they were originally only responsible for product marketing? How do we handle the complicated issues of component purchasing and inventory management? These jobs were handled by the headquarters, and the overseas businesses had no experience in these areas.

Several things helped lay the foundation for its implementation. In 1990, Acer entered the newly emerged mass merchandising channel in the US. We used another brand, Acros, to ensure market differentiation from our existing business. After the trademark was registered in US, we found that we could not register the trademark in Taiwan as there were other similar trademarks already registered. As a result, we could not manufacture Acros-brand computers in Taiwan. Alternately, we manufactured semi-finished goods in Taiwan and shipped them to the US for final assembly and labeling.

This was the earliest prototype of Acer's uniload approach. As Acros was in its most preliminary and simplest level of "local assembly," it did not bring Acer the effect of cost reduction and speed acceleration.

With this started, we started to classify PC components into several categories according to their characteristics. The first category consists of components that do not change often in specs, such as housing, power supplies and floppy disk drives. The second category is the motherboard that is supplied internally and has fast market changes. The third category consists of fast-changing components that must be sourced outside, such as microprocessors and hard disk drives. After grouping the components, we established various management systems for material supply and inventory (similar to logistics in an army).

The first category of component changes very little in price and has a longer life cycle. Each RBU can order in large quantities with low risks. These are shipped by sea for lower cost. Next, the motherboards are shipped by air to keep its "freshness" and lower the risks of inventory depreciation. Third, with the same consideration on speed, hard disks and microprocessors are purchased by RBUs directly from the local market. Using modular manufacturing, we are able to quickly assemble different products according to market requirement, and are able to reflect price reductions based on the latest pricing of the key modules.

Meanwhile, Acer developed two important technologies in 1991 which facilitated the implementation of the "fast-food" business model: the "ChipUp" technology and the "screw less housing."

With ChipUp technology, Acer was able to develop a motherboard that ran all kinds of Intel microprocessors (just as a hamburger may have different kinds of meat but the size of the hamburger buns are always the same). With screw less housing, it takes only 30 seconds to assemble one computer. The introduction of the two technologies have made the final assembly of computers very simple. Even though the assembly sites are located in various parts of the world, it is still possible to maintain a stable product quality.

It's easier said than done. When the overseas business unit first implemented the fast-food business model, they were unable to adapt to the new logistics operation. For instance, when customers placed orders of 1000 units of computers in the past, the marketing unit only had to get a shipment directly from headquarters. After components are purchased

separately, purchasing of housings has to pull up 3 months ahead, and one month for motherboards, two weeks for microprocessors. Others such as hard disks and product packaging have to be dealt with separately. The operation of the whole system becomes much more complicated.

Later, we sent a task force to the overseas operations and helped them establish various systems. After going through stages of learning and adaptation, the overseas business units began to show their advantages in speed and cost. Their operation was also normalized.

Learning from the Restaurant Business

Before “local assembly” took place, I first borrowed the fast-food concept to illustrate Acer’s new strategy during Acer’s Worldwide Distributors Meeting held in Mexico in 1992.

I used the restaurant business to mirror the computer market. Chinese restaurants are all over the world. Most customers also find Chinese food delicious and inexpensive. However, Chinese restaurants around the world lack a high-class image as it is not run systematically and suffers from inconsistent product quality. The phenomenon resembles computer clone makers all over the world. They have poor product quality and have no brand name image at all. McDonald’s, on the contrary, has become a worldwide fast-food chain store with a simple menu, systematic operation and one unified brand name. Hence, by adopting McDonald’s operation model, we built on the strength of motherboard manufacturing while preventing its shortcomings.

After adopting the fast-food operation model, Acer’s inventory turnover rate improved 100%. The decline in inventory not only reduced operating risks for the company but also created the best condition for just-in-time introduction of new products. In the past, a set of computer was exported by sea. Now, we simply ship the motherboard by air to the local assembly sites and product introduction is pulled ahead by one month. Meanwhile, it is also necessary to clear existing inventory before introducing new products. With inventory reduced, the time required to clear the inventory is shortened, making new product launches even more effective.

More importantly, after the business model was modified, Acer’s products became more market-oriented. When Acer did the assembly in

Taiwan, we always failed to understand the market trend. Hot products were always short in supply and excess products were stocked in the warehouse. Now that Acer has 34 assembly sites in 28 countries all over the world. We are able to flexibly churn out products based on the customer's needs and to cope with market changes.

Today, the significance of Acer's fast-food business model is not limited to enhancing speed and cost. More importantly, it may bring about an even wider development space for Acer in the future.

Localizing the "Central Kitchen"

Just as new fast-food stores keep sprouting up around the world through various ways of networking such as franchising, direct sales or partnership, a computer fast-food store is also a feasible idea. It can create business opportunities we never imagined before, and it can continually enhance its competitiveness and bring greater benefit to customers. The opportunity is endless.

A simple example. The characteristics of a fast-food store are: fresh, convenient, and consistent quality. Many people have the experience of ordering pizza. As long as it is from the same company, the pizza delivered won't have too many discrepancies in quality even though they are from different branch stores. Someday, maybe Acer's fast-food model can develop the same way: through computer networks, customers can order from their neighboring AcerLand for computers with the required specs, and we can quickly assemble the product for delivery.

This is an example of a computer fast-food store model developed to the extreme. But it is absolutely not just a dream. Isn't the auto industry planning to develop a similar system?

Whether Acer will take this approach depends on the overall environment. For example, we need to assess whether the market is already this competitive. Can customers accept such a concept? Does the company have the management capability? With its first step into a fast-food business model, Acer has laid the foundation for continuous progress in the future.

The short-term goal we are working on is to localize the "central kitchen." Acer's current "central kitchen" still concentrates in Asia, such as Acer's factory in Hsinchu, Taiwan and Subic Bay, Philippines; and

API's investment in Taoyuan, Taiwan; Penang, Malaysia; and Suchou, China. In the future, as the market size becomes larger, the central kitchens have to be moved near the marketplace as well. Currently, we are planning to set up central kitchens in America and Europe in order to provide support locally. In the future, the role Acer Taiwan will play is to develop new component modules and "new menus," and at the same time to support those areas that have not reached economies of scale.

When a high-tech product develops into a mass-merchandising product, the industry will gradually become a low margin, logistics- and efficiency-oriented operation. The customers will be expert at considering how to make the best purchase. Two years ago, Acer was the first to merge these concepts into the missions of Acer's business units. The mission statement of the regional business units is: The most effective global marketing and distribution network for branded systems and components. The mission places emphasis on logistics and distribution efficiencies.

The mission statement of the strategic business units is: Leading global component supplier to OEMs and RBUs, which is to fully utilize the function of localized central kitchens – business size and manufacturing capability.

These are the advantages that fast-food stores depend on all over the world.

Decentralizing Without Losing Control

Three years after implementing the fast-food business model, it began to show significant results, and the worldwide media began to treat it as a visionary business concept.

A Chinese executive in Digital Equipment Corporation (DEC) also intended to promote the fast-food model within the company but did not succeed. Currently Mitac, FIC, and Elite have set up assembly bases in the U.S. and Europe, but are not as extensive and diverse as Acer's operation. I think their model is more like a "chain restaurant" model, with fewer sites but a larger size for each site.

For a production base to supply several markets with different languages, its flexibility, market size and local resource utilization required are still different compared to a fast-food business model. It is not easy,

however, to further decentralize the operation. These assembly sites are far from the headquarters. In terms of product assembly or logistic capability, it requires sufficient human resources so as not to lose control of management and product. Therefore, a basic problem occurs: Where is the human resource? Is it enough to depend on human resources in Taiwan?

In fact, Acer also faced the same problem when it planned to move assembly overseas. Following the straight thinking pattern, we would think that things would not work out. However, upon thinking reversely, since "local assembly" has better advantages in terms of speed and cost, the linchpin is to come up with solutions instead of giving up.

The reason Acer can solve this problem is due to the strategy of "common interest." With a "local touch" strategy, we are able to decentralize while maintaining product quality at the same time. When McDonald's first came to Taiwan, they opened up the market quickly because they were able to find local partners.

This set of strategies were developed for breaking through bottlenecks. If we had been stuck in our original thinking pattern, we would not have thought of the fast-food business model.

Inexpensive Brand Name Product

To further develop the thinking pattern of a fast-food business model, the fast-food concept not only applies to management but it also contains a higher level of operating philosophy.

While developing the fast-food business model, I also conceived a few related innovative concepts. Some concepts had to go through debates with our colleagues before they were accepted. For instance, I believe some day a system will be sold at a cheaper price than a component. Among them, assembly and brand name are both considered components. Many employees were baffled by this thinking.

Think about the number of components that go into a computer system. It contains disk drives, microprocessor, memory chips, power supply, housing, etc. Buying so many components at one time, customers naturally deserve a cheaper price than the original total price. This is similar to the restaurant business wherein ordering a package meal will always be cheaper than ordering a single item. As the customer has made

such large purchases, the assembly can be considered a gift for them.

However, the current status in the computer industry is that a “package meal” is more expensive than a single item. The package meal is like the product of IBM, Compaq and Acer; the single ordered item is like the no-brand computers found in electronic shopping malls, in which the storekeeper helps to assemble the components selected by the customers. The non-branded computers are cheaper than branded ones because they don't come with after-sales service and quality assurance. In my logic, branded computers not only should have better quality and service, they should also offer more competitive prices as they enjoy volume production and lower component cost. In fact, this is the concept of a mass merchandising store.

For instance, if my company is ten times larger than another company, by participating in the same exhibition, our five rented booths are able to take away more orders than the one booth of the other company. After sharing the cost, the marketing expense of the large company should be lower. Therefore, there is no reason to command higher prices.

To achieve this status, there are two prerequisites. First, consumers have to recognize good products and understand that the random purchase of various components equates to a higher total price. Second, large companies cannot have a bloated state of mind, and add in any unreasonable operating cost to the selling price. As such, the large company can provide a product with good quality and competitive price, and yet make more money than others. Customers will consider the purchase worthwhile.

Since brand name is one of the components and the system price cannot exceed the total price of all components, a branded computer has to sell at a cheaper price than a no-brand computer. I often tell our colleagues that the function of a brand name is not to command a premium price. The function of a brand is to facilitate conducting business and help lower operating cost. As it allows customers to identify the product easily out of a pack of similar products, it helps to enlarge the business size and reinforce customer's confidence toward the product. For a customer, buying a branded product is buying the reputation of the company. In the computer industry, quality and function are prerequisites for a brand name product. It just does not sound right to ask customers to pay premium price simply because it is a brand name product. Customers

are not to be cheated; they know what they are getting for with their money.

But even today, many people still don't understand the logic of a low-margin business. Once during a speech, an individual asked me, "How can you enjoy low margin? This is not an operational goal for a company." To answer the question, I once again gave the example of selling duck eggs and stationery. As long as the product and the cash turnover rates are high, the result of low margin, low operating cost and high turn-over is a high return on investment. Since Acer is making no less profit than other companies, we are enjoying, not sacrificing.

Now Acer continues to work toward this direction. It is not only beneficial to Acer but also to customers. Only through this way can we ensure that Acer will grow and prosper continuously into the future.

It echoes a Chinese saying, "Good-naturedness is the source of wealth."

Client-Server Organizational Structure

- Straight thinking:** Within a group, each member company has to purchase from each other so as to prosper together
- Reverse thinking:** It is not necessary for member companies to purchase from each other. They will still enjoy the prosperity together.
- Thinking logic:** Allowing each company to pick their suppliers and customers with the best terms will help tional market

The Aspire multimedia PC introduced in September 1995 is an extremely important milestone in Acer's product development history. Its significance does not lie in its potential to reach annual sales of 2 million units in 2 years or over US\$3 billion in revenue. What it represents is the success of Acer's client-server management system.

I did not know much about the project when it was initiated by Acer America. Three months later when I saw the housing design by Frog Design in the U.S., I sensed that the introduction of this charcoal green

computer box with its unique shape would be a big hit in the computer industry.

Within a short period of nine months, Aspire was launched in the U.S. market. It also smashed the proud declaration of some U.S. computer companies in 1994 that they were going to drive Acer out of the market by the next Christmas (Christmas is the hottest season for computer sales in the U.S.).

Coordinated by Acer America, this project is the cooperative result of the Group members. Acer America was in charge of the product concept, software interface, installation procedure, market planning and promotion. Mechanical and electronic designs were supported by Acer Peripherals Inc. and Acer Inc. TV commercials were jointly produced in Singapore and New Zealand. The cartoon figure which represents the product image, OOBIE boy, was designed in South Africa. Communications did not go through headquarters but were conducted directly among different business units.

I believe if Aspire were to go through the traditional communication channel to file reports among headquarters and many business units, and to go through the process of argument, revision and approval, based on our previous product development experience, it would have taken at least 1.5 to 2 years to see the final product. By that time, the daring creativity of the product may have already been diminished.

Client-Server Structure Becoming the Trend

Since "global brand, local touch" became the strategy for Acer's globalization in 1992, every company in the group became an independent operation in its local market. To effectively manage the loosely-knitted organization that is different from the traditional structure, there has to be a management system that is different from the traditional model. As Acer has been taking a decentralized approach, a centralized organizational structure is not suitable for Acer.

After entering the '90s, the development trend for corporate computing has moved from mainframe and minicomputers to personal computers. The client-server structure has also become a trend. Its basic principles fit many aspects of Acer's corporate culture. This new computing structure was therefore adopted in 1993 and developed into

Acer's unique management model.

The so-called "client-server" structure is designed to connect various PCs in the office with the servers performing different functions so that a complete and flexible network is established. The clients and servers are closely but flexibly connected to one another with every PC acting as an independently-operated "client," and the "server" on the network ready to provide the best resource.

In terms of development background, the evolution of human organizational history happened to match with the development of computers.

In the early days, only mainframes had computing capability. The terminal was the space for temporary input and output and had no processing power itself. Similarly, fifty years ago, only a few rich men knew about management. They hired lots of workers only to implement instructions.

The best analogy for the large mainframe structure is an army. The power of an army centers only on the very few top officials. The obligation of the others is to obey orders. Such a structure is very effective in executing simple instructions as it achieves the effect of high obedience through a tightly-controlled and disciplined structure.

When the performance of personal computers becomes more powerful and the price becomes cheaper, the PC is able to handle higher levels of tasks as well. Mainframes are more expensive and yet they are unable to handle more complicated assignments. Hence we have to rely on PCs to a greater extent. However, since PCs are widely dispersed, it becomes a problem to manage all the stand-alone computers and make proper delegations. This gives birth to the structure of "client-server."

The client-server structure is a new computer structure exercising the advantage of PCs and handling complicated work at the same time. It enjoys low cost, high efficiency and great flexibility. As work has to be reassigned among users, the users have to spend time learning the operating system in order to generate the greatest efficiency.

The same logic applies to an organization. As human activities get more complicated, a corporate leader can no longer handle all tasks by himself regardless of how capable he is. At the same time, due to the enhanced educational level and the effective transmission of knowledge through mass media, more and more people are capable of managing a

business, just like the popularity of personal computers. If a CEO does not delegate to encourage contributions from employees, he is wasting resources.

Simultaneously Being a “Client” and “Server”

More importantly, companies have to cope with fierce competition and dynamic changes in the market. If any decisions have to go through the headquarters and back to the business units again for execution, timing and business opportunities will be missed amidst the long chain of communication. Hence, any hierarchical structure similar to the mainframe will be in an inferior position when competing in terms of speed and flexibility.

Several factors need to exist for the successful implementation of a client-server structure. First, the business has to be big enough so that it can still maintain an independent operation and make a profit after it is decentralized. If the business size is not large enough, it will be unable to survive after decentralization. Second, the assignment has to be complicated enough since a simple assignment can easily be handled by one single PC and does not need the support of a “server.” Third, an executor needs to work independently besides executing instructions. As a result, for a member under the client-server structure, the most basic principle is to accomplish whatever he can handle and ask for support from partners for the work he cannot accomplish alone, and he is also ready to support other partners any time.

Looking at the operational model of multinationals in developed countries, Japanese companies are like the mainframe-type hierarchical organizational structure. The US companies are like the structure of the minicomputer.

A minicomputer is structured between mainframe and client-server, and is halfway toward a complete network structure. For example, IBM's New York headquarters is a mainframe, while its Tokyo regional headquarters is a minicomputer that manages all of its Asian branch offices. The minicomputer structure has a further degree of delegation than the mainframe but it is not a complete delegation. For instance, if the Tokyo or New York headquarters disagree with a decision made by the Taiwan branch office, the decision will be overruled.

European companies adopt a structure of multiple-local operations, a network with PCs and servers not connected to each other. For example, Philips used to have manufacturing facilities in many countries to support the needs of local market. The disadvantage of such a structure is its difficulty to reach an economy of scale. This is why recently Philips closed down a few of its factories and adopted a strategy of centralized manufacturing.

The Acer way is different from the three models mentioned above. Acer's business worldwide takes on a local partnership approach. The center of decision-making is the shareholders' meeting in each business unit. The headquarters can only exercise its influence on business decisions through the shareholder's meeting. In this management structure, each business unit plays the independent operating "client" as well as the support-providing "server" for other businesses. For instance, Acer Peripherals, Inc. (API) is the "client" developing and manufacturing monitors, while it is also the most professional and efficient "server" with economy of scale to provide products to the Regional Business Unit (RBU).

The reason that multinational companies in the industrialized countries fail to implement a client-server organizational structure is because they can only achieve a limited degree of delegation. The reason for failing to achieve total delegation is partly due to the desire for power and total control, and partly due to the lack of confidence in whether the delegated units can handle the job well. The reason for the lack of confidence is twofold: first is capability; second is the concern that after delegating, each department will be unable to cooperate with the corporate development, resulting in organizational chaos.

Therefore, a subjective qualification before implementing the client-server structure in a company is that the CEO, the designer of the operational system, must be able to enjoy and feel comfortable with delegation. IBM took a decentralized management approach several years ago, but it reverted back to centralized approach as the leaders were not comfortable with empowerment.

In fact, we all know that democracy and humanization have become a global trend. This is proven by the development trend of demanding autonomy and the emphasis on "local touch" in many parts of the world. Even though everyone knows the necessity of empowering employees at

lower levels, the problem lies in how to delegate to reduce the risks associated with it.

Viewed from managing risk, since a centralized structure concentrates all resources in the headquarters, the headquarters takes all the risks. A client-server structure, however, allows each unit to make its own decision and to shoulder its own business risks. In other words, allowing the risk-taking unit to make decisions can in turn dilute and reduce risks of the headquarters.

To reduce the business risk of each unit, the second prerequisite in implementing the client-server structure is that all business units must have the capability to make and implement a decision. Moreover, the members are governed under a general direction and work effectively for common interest.

Acer is able to implement the client-server structure since we already have the foundation of a decentralized management system. Most employees are the company's shareholders and they share a common interest. Moreover, the division heads are all senior employees and are able to maintain rapport among themselves.

Setting Up Operational Rules

This is not to say that Acer's client-server structure requires no modification. In fact, after the first introduction of this client-server structure, its operation was not as mature as it is today. Since Acer was the world's first to apply this brand new computing structure to its management structure, many details had to be clarified and discussed in the beginning. Hence, we make use of the Acer Summit Meeting which takes place twice a year to define and clarify the details. After years of discussion and implementation, the operation has now become more effective.

I often wonder that if it were not for the rapport among our partners and the confidence they place in me, I would not know how Acer's client-server structure would develop.

I don't think every company can quickly adapt to the client-server approach as it requires the right environment to operate successfully. Companies more suitable for the client-server approach are those which have no old organizational burdens and those new business units in old

companies. The new business units can spin off to form an independent operation and conduct tests. The system can then be promoted to the whole company on a step-by-step basis. This is because large companies have adopted the mainframe management structure for years, taking a drastic change to a client-server structure will result in management and operation chaos.

What are the reasons? First, the prerequisite in implementing the client-server structure is that not only the "client head" must have wisdom but all the members must also be competent to handle any assignment.

Second, just like a computer network must operate based on the operating system, an organization must also follow rules and principles to communicate or trade. If members fail to follow the rules, the whole network will become chaotic.

Therefore, members on the network must possess two basic qualities: capability and discipline.

Separating Bills Even Between Brothers

Any organization has its rules, but the rules of the client-server structure are different from that of large mainframes. Therefore we have to learn these rules from the start. While trying out a client-server structure, company members have to learn how to delegate and respect.

Meanwhile they have to make appropriate adjustments on communication methods and responsibility ownership. These processes will not be completed within a short time. While a company is establishing computer networks, it also requires time to learn, not to mention an "organic" organization conducting a major transformation.

On the other hand, a computer is only a machine. It will function according to instructions once programming is completed. For human beings, no matter how many rules are set, they will not absolutely follow the rules to the tee. Hence, when a company is implementing the client-server structure, its rules must be as clear and simple as a country's constitution; and it cannot be changed. If the rules are too complicated, it will require frequent clarification. Similarly, if a country needs to clarify its constitution very often, the country will end up in chaos.

In Acer, we only set rules on a few general principles such as pricing and brand name. For example, sales from Strategic Business Units (SBUs)

to Regional Business Units (RBUs) is based on market price. Brand name products must be marketed through RBUs, and RBUs have to allocate 2% to 5% of revenue as the advertising budget of brand name business. SBUs also have to allocate 0.5% of its production revenue to a brand name promotion fund.

We are giving our BUs very limited restrictions and a large comfort zone for their management freedom. For instance, RBUs are allowed to purchase from different SBUs and are free to cooperate with any suppliers they think ideal. It is all right if the SBUs have to close down for this. It shows that they are not competitive at all.

Similarly, SBUs give RBUs the same treatment they give OEM customers. If brand name products are unable to compete against OEM products on the market, it shows the RBUs are incapable.

Take Acer America's development of the Aspire home PC as an example. If all business units in the Group refuse to distribute this product, it means Acer America is inferior in its capability. If they think it has potential, they will have to follow the rules and pay royalties to Acer America.

It does not mean that I am happy to watch every unit close down. I am hoping that everyone maintains a sense of crisis at all times. More importantly, we will equally provide the most competitive conditions to each unit so that each unit can survive in their respective field. Otherwise, each unit would only fight over issues such as who is getting more advantage and the company can never enjoy peace. We would rather equip each unit with powerful weapons so that they can fight with outside competitors.

With a similar concept, if the shareholders meeting of any BUs results in a decision to leave the client-server organization structure, they are free to do so at any time. Of course, they can no longer enjoy Acer's technology and brand name assets later. In other words, Acer does not wish for a forceful superior-subordinate relationship. Instead, it wants to provide the best resources so that each BU is willing to stay with the Group and follow the "stinking old rules."

We established this structure on a benefit-oriented basis, with open and reasonable trade benefit as the operating guideline. As an old Chinese saying goes, "Even between brothers, the bills should be clearly separated." Every company in the Group is responsible to its own

shareholders and is their own boss. This way, there will be no illegal transfer of benefits under the table.

With rules on general principles, all efforts can be concerted on the direction of generating benefit and will not waste time over minor trifles. Till today, it has not yet happened that business units within the Group have to fight over the Group's "constitution".

Staying Away if No Added Value

Viewing from the angle of organizational management, the reason the client-server structure is more efficient than the mainframe structure is that it has an important characteristic: No added value, no support needed in between. If there is no added value, it's unnecessary to keep any functions or positions. A typical example is in some bureaucratic organizations, there are always some officers whose sole responsibility is to stamp chops without any other contribution. In fact, the process of stamping chops or signing signature add to the operation cost, and more importantly, delay the process. For the officers in-charge, they are not only wasting their time but also lose the opportunity of getting promoted. Social resources are wasted quietly this way.

Acer's "fast-food" business model is based on the principle of "no value added, no stay in the post."

When Acer used to manufacture its own system computer, it purchased key components such as hard disk drives, monitors, microprocessors, and assembled them with Acer-made motherboards. The sales revenue also included the value of key components. At that time, Acer's annual sales were around US\$380 million. After deducting the key component value, the net revenue was only around US\$185 million. Since Acer was not adding value to these key components, we should give up the business and allow RBUs to purchase them directly from local suppliers and do the assembly in the local market.

Of course, we have to find out where Acer can create added value. Obviously, the answer is motherboards.

It would cause a sudden decrease to Acer's revenues; however, it resembles the stamping procedure in a bureaucratic system which has no added value. Purchasing key components and having them assembled may create huge revenue; but in reality it is a losing situation. Components

also command inventory cost and depreciation cost. There is also the cost of time. In other words, this part of revenue is unreal.

The approach may seem unbelievable to many people. It is common that some group companies in Taiwan transfer assets among various companies in order to increase revenues, profits and asset values on the accounting book. The so-called financial leverage is simply magnified prosperity.

Acer did not take this approach. We even took out from the group revenue the transaction revenue repeatedly calculated among group companies as early as 1987, such as the revenue from manufacturing units to the sales units. Very few companies in Taiwan have adopted such an approach.

When Acer started to focus on motherboard manufacturing, we enjoyed many benefits. Not only did decision-making and product turnover become faster, more importantly, there is no deviation on the decision-making process.

Making the Money We Deserve

Why is there a deviation in the decision-making process? It can easily be discovered from the huge impact on Taiwan's motherboard manufacturers by Intel's entrance into the motherboard business.

The motherboard is an important component in a computer. But, in fact, the added value of motherboard is low (see next chapter). However, in the IT industry, the positioning of motherboard manufacturers is relatively higher. The major reason is that the motherboard manufacturers include the added value of the microprocessor to the motherboard. As we know, the added value of a microprocessor is much higher than the motherboard itself. The motherboard manufacturers easily misjudge their real strength. Some of them even resell the microprocessors to make a profit from the price difference, which has a higher profit than the motherboard.

Think about it. Intel has no reason to allow other manufacturers to make these profits. Why would Intel promote the image of "Intel Inside" over the past few years? Why would Intel skip the motherboard manufacturers and sell microprocessors directly into the retail channel? It is because motherboard manufacturers should not make a profit that does

not belong to them, which has created lots of misunderstanding.

It is understandable that Intel does not allow motherboard manufacturers to make a profit from the trading of microprocessors. Having invested tens of billions on building manufacturing plants and beefing up R&D, Intel is entitled to decide how much money they want to make instead of the motherboard manufacturers. How can Intel stand idly by and not take any action to protect its interest while other companies make money that was supposed to be Intel's?

For Acer, we were not as shocked as other manufacturers when Intel announced its engagement in the motherboard business. We had relied on the added value we created ourselves to make money, and did not treat the microprocessor as a profit that we should make. We are not afraid to equally compete with Intel in the motherboard market. This is an important state of mind in managing a business.

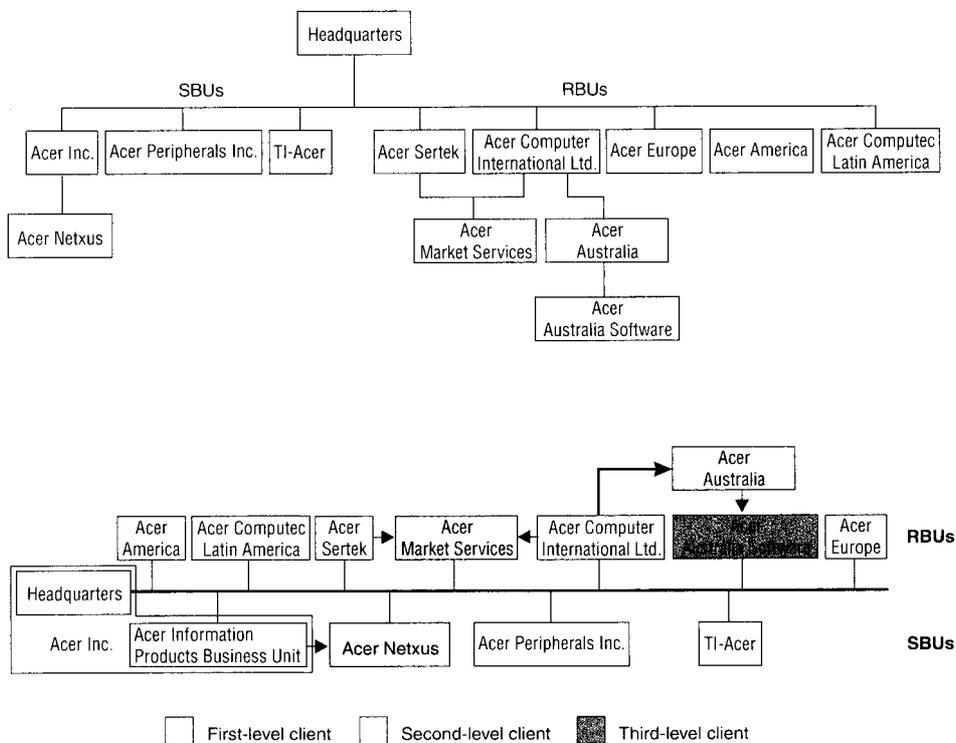
A CEO must maintain such a state of mind at all times. Based on historical background or their own efforts, maybe some companies and organizations used to enjoy certain privileges. However, when change takes place in time and environment, these organizations have to bravely toss away those privileges. Otherwise, they will only be eliminated eventually by the new competitive environment.

IBM and DEC, for example, had been the top achievers in mainframes and minicomputers due to their past efforts. Hence, they were entitled to enjoy their profit. However, once their advantages had restrained the development of their customers, their customers tried to get rid of them whenever the opportunity arose. Efforts of the past do not guarantee that one can continue to enjoy advantage and profit forever. If one holds on to the past advantage, there will be two results. First, customers will be offended. Second, the company will make too much investment in the wrong direction and fail to identify "where's the beef." The timing of transformation and re-engineering will be delayed.

Breaking Up the Organizational Hierarchy

Another reason that the client-server structure is more efficient than the traditional structure is that the client-server structure is not confined by the original hierarchy. In the traditional hierarchical structure, the interaction between subsidiaries must go through the parent company.

The third- or fourth-level of spin-off companies still maintain the same interactive relationship. In a client-server structure, the second- or third-level of "clients" is free to conduct any interaction without having to go through the upper level "client." Moreover, the second- or third-level of clients has the opportunity to be upgraded to the first-level "client."



Difference between a traditional hierarchical organization structure (upper) and a client-server organizational structure (lower). In a traditional hierarchical structure, the parent company (Acer Inc.) and its spin-off company (Acer Netxus) are in a superior and subordinate relationship. In a client-server structure, the two companies are in an equal position

For instance, Acer formed the Acer Latin America joint venture with its Mexican distributor, while Acer Latin America formed the Acer Chile joint venture with the Chilean distributor. The two business units can conduct business transactions without having to go through headquarters. This way, it will be efficient, low-cost, and the transaction direct and clear. Otherwise, the passing-down of messages through various levels will eventually create misunderstanding.

Such organizational behavior better fits human nature. For instance, although we respect elders in our societies, if we want to make friends with someone of our grandfather's generation, do we have to go through the approval of our father and grandfather before such acquaintances can be made? Similarly, why should business transactions go through various organizational ranks?

For Acer's global strategy, it is only when the "global brand, local touch" strategy combines with the client-server organization structure that Acer has the opportunity to surpass IBM in the competitive worldwide market. As the local partners have a majority shareholding, they will protect the corporate image and reputation, and they will dedicate themselves to protect the local consumers as well. Since the operation is delegated to run independently, the local head cannot shirk responsibility to headquarters if the business is not well-managed. As the company goes public and becomes a local company, the local general public will have better reasons to believe Acer is different from the local subsidiaries of other multinational companies and will not close down suddenly.

Maybe I can claim clearly that this is Acer's "open secret."

Though made up of only a few words, these strategies effectively solve the very delicate and sensitive issues faced by many traditional multinational companies. The strategies also greatly increase Acer's possibility of success in its overseas operations, and equip Acer with more qualifications of achieving healthy operation.

21 in 21

Straight thinking: To secure our benefit, we have to prevent our partners from taking advantages of us.

Reverse thinking: To secure our benefit, we must establish a

cooperative relationship that protects and treats the benefit of our partners as our own.

Thinking logic: If we take away all benefit, it is inevitable that partners will take all possible actions to protect their own benefit. It will end up in a weakened company structure and a loss for both parties.

The original version of “global brand, local touch” first appeared in the Acer International Distributors Meeting held in Cancun, Mexico in June 1992.

In the opening speech, I told partners from all over the world, “Acer is not only a Taiwan company. In a not-too-distant future, we will become a Mexican company.” This is our belief in localizing Acer’s operations worldwide. Moreover, “We invite our partners to rewrite tomorrow’s marketing textbook!”

After the speech, Max Hung, then the general manager of Acer Latin America, raised his concern that my comment would create ambiguity about Acer’s intention and effort to become a global company.

In fact, I also raised a similar slogan in 1989 that Acer was to become a “global citizen.” However it was still a concept at that time. We only felt that Acer should develop toward this direction, but had not come out with more appropriate expressions.

Acer’s characteristic is that employees are allowed to raise a different voice. In order to convince everyone, I am forced to complete the whole thinking process. Finally we developed a complete version of “global brand, local touch” strategy, which include local shareholders majority and the “21 in 21” concept (21 publicly listed companies by the 21st century).

In March 1995, I visited Mexico again to deliver a speech. By that time, Acer already established a partnership of “local shareholder majority” with its Mexican partner. Half a year before then, Harvard University rated Acer as the “most outstanding case study in globalization management.” I told the audience, “I have made good on my promise as the cheque I issued three years ago has been cashed.”

Old Wine in a New Bottle

For Acer, the new globalization strategy of “local shareholder

majority" is, in fact, an offspring of Acer's "traditional concept." When Acer established its US, Taichung and Kaohsiung branches, the employees-in-charge had taken up to sixty percent of the shares.

Pushing a similar concept, I motioned to lower Acer's share in API and Sertek to below 49% during the Acer's Shareholders' Meeting in 1991. However, to respect the minority opinion, it was resolved to lower the share in two stages. The first stage still maintained an over 50% share, and then lowered to 49% in the second stage. It was unexpected that this resolution delayed the IPO timing for both companies.

Hence, the "21 in 21" concept has its long tradition, but its scope and scale were different. Therefore, when the academic and business fields find Acer's strategy peculiar, we do not feel that way at all.

Both the academics and the business fields find it strange that Acer is willing to lose control. At the same time, they also feel that delegation and sharing with employees are correct. When we have exercised the strategy of delegation and sharing to the extreme, the globalization strategy of local shareholders majority has to naturally come into shape.

The "21 in 21" strategy has a great significance to Acer. It continues the re-engineering efforts motivated by the "fast-food business model," and takes Acer to another phase of high growth.

In January 1994, we announced the goal of "2000 in 2000" (to reach NT\$2000 Yi in revenue in the year 2000, equivalent to around US\$7.3 billion). In 1995, Acer's group revenue grew 70% to reach NT\$1500 Yi (NT\$150 billion, around US\$5.5 billion), which expects to pull the goal ahead by four years to 1996. Now it is estimated by the general public that Acer will reach NT\$300 billion (around US\$11 billion) in year 2000. But I think it is possible to reach NT\$400 billion (around US\$15 billion), which is double the original goal. I believe the result can be attributed to the success of the "21 in 21" strategy.

The strategy conveys an important message to our colleagues around the world: "the company will be yours someday, sooner or later." Due to this strategy, Acer has created a basic environment for establishing a solid partnership. Only when driven by common interest will colleagues have the willingness to reduce risks and grasp opportunities at any moment.

Role Change From a Boss to a Partner

With the presence of “21 in 21,” the function of a “fast-food business model” and a “client-server structure” can be exercised more thoroughly.

For instance, when system assembly is moved to RBU sites, it will inevitably reduce the revenue of the parent company. Why would the parent company still consent to such a decision? It is because Acer is the shareholder of RBUs, not a parent company that takes 100% ownership of its overseas operations.

It may be difficult to distinguish any difference between the two roles, but the practical result achieved is completely different.

Assuming that Company A is my overseas subsidiary, my confidence level in its capability will naturally be less than in the parent company. Although computer assembly has limited added value, to play it safe, we would opt to do it in the parent company. Another alternative is to evaluate whichever area has a better tax rate, and we can decide whether to place the business with the parent company or the overseas subsidiary based on tax planning. Both approaches are the average operating models for multinational companies.

However, if I am the shareholder of Company A, my thinking pattern will not be the same. Through disintegration and delegation, the parent company will make a profit from its professional field while the part with less or no added value is left to Company A. Although I cannot make money from that delegated part, I do not lose either as I share half of Company A's profit. As a result, Acer can still make profit from this approach.

I have also discussed this concept with Japan's industry leaders. However, they could not agree with this idea. In their minds, marketing means making money from price difference. It makes perfect sense to add profit to a fixed cost before selling a product. Acer has different ideas. Since we are the shareholder of the overseas operation, we will only make profit from the parts where we contribute added value. Those parts without added value will be sold at net cost to the overseas units and give them the profit. The change in mental attitude is quite important. Only in this way can the “fast-food business model” be exercised to its best efficiency.

Take Taiwan's home appliance industry as an example. When a

Japanese company forms a joint venture with a Taiwanese company, they will definitely request the Taiwan partner to purchase key components from them as they intend to make money from the transaction. This is why the home appliance technology in Taiwan, for all the years, has been controlled by Japan.

On the contrary, Acer never forbids its RBUs to purchase motherboards or monitors from other companies. On one hand, it will force us to become the most competitive component supplier in the world. On the other hand, if Acer cannot be the best, instead of making the overseas operations lose money by forcing them to buy from headquarters, we would rather allow them to purchase components locally with the most competitive price. In that case, we can still get a return from our investment in them.

In other words, the “fast-food business model,” “client-server structure” and “local shareholders majority” are a mechanism of “three in one”, while the last one is the core idea.

For instance, if there is no “client-server” structure when implementing the “fast-food” business model, whenever an RBU runs into any difficulties with component supplies, it will rely on headquarters to solve the problem. But under the strategy of a client-server structure, each local operation is already a “client” with independent operating capability. It can no longer rely on headquarters for everything and will be forced to establish its own independent operation.

However, if there is no incentive for an overseas subsidiary to take operating responsibilities, it will still rely on headquarters eventually. Allowing the implementation of “local shareholders majority” will enable local executives to truly dedicate themselves to managing the company. Otherwise, the result of delegation only brings about failure to each unit.

The three strategies are now closely connected to each other. However many of the strategies still had not taken its shape around 1992. In 1993, the concept of a client-server structure was formally introduced to Acer, whose prototype had come into existence during Acer’s Renaissance Meeting. Moreover, Acer already had the concept of a “local shareholder majority” since the company was established. All of the strategies were therefore reorganized into a system.

The materialization of the strategies helps to build internal consensus on one hand. On the other hand, it also provides a reference for future decisions.

Breaking the “Big Rice Pot”

The Chinese term, “big rice pot,” means everyone gets to eat from the “big rice pot” at a meal like in a commune whether or not a member contributes his share to earn the rice. This term is herewith used to imply a situation in an organization.

Taiwan’s economic structure is the background behind Acer’s development of the “local shareholder majority” strategy. A big difference exists between Taiwan’s economic structure and that of the U.S. and Japan. That is, Taiwan is an export-oriented country with 95% of GNP coming from export-related activities. The U.S. and Japan, however, have a large domestic market that supports up to 50% of their revenues. Therefore, compared to the companies in the industrialized countries, it is more important for Taiwan companies to go global in order to reach an economy of scale. This is also the reason why Acer has to develop the “Fourth Way” of the globalization model in differentiating with the U.S., Japan and Europe multinational companies.

Viewing from another angle, if the industrialized countries wish to increase their emphasis in the overseas market in order to reduce risk, they will also have to start from the “local touch” approach. I mentioned several years ago that in the 21st century, Taiwan’s elite human resources can no longer work for foreign companies on a long-term basis. This phenomenon is beginning to unfold. In other words, if a foreign company intends to have a strong foothold in Taiwan, the only way is to establish a partnership with the Taiwan elite. The partner relationship, however, is not the current approach of managers having stock of the parent company.

If the Taiwan manager is holding stock of the parent company, no matter how well the Taiwan operation is managed, as long as the European and US operations are losing money, the Taiwan manager still cannot get a bonus. This was the problem that Acer encountered. At that time, although Acer Taiwan had always been profitable, due to the loss incurred in the US, Taiwan employees could not get a bonus.

If Acer had not acquired Counterpoint and Altos 100%, but only invested below 50% and allowed them to operate independently, I believe the result would have been very different. Owning an American company 100% makes no difference to its managers even though the operating

result is not good. On the other hand, employees in Taiwan had done a good job but did not receive an appropriate reward, which is very unfair. It does not matter if it is to take care of the benefits of outstanding employees or to look for improvement motivations for business units with bad performance, we will have to solve such problems. The only way is to allow employees to become shareholders of their respective companies so that this situation can be improved.

Based on the same concept, we divided Acer Europe into three units in 1996.

Originally, Acer Europe only had one headquarters to manage more than 20 countries. The problem of a "big rice pot" inevitably occurred. According to the logic of "local touch", Acer should have set up one company in each country. Since we were unable to find so many management teams within a short time, we decided to divide the territory into three areas at first and set up three companies as sub-regional headquarters.

Before then, my friends in Europe expressed different opinions. They thought this method will not be beneficial to Acer's IPO plan in Europe. Instead, it would be easier for one company to go public. I told them, "One company indeed may get an IPO faster; however, how do I solve the problem of unbalanced interest when Northern Europe makes money while Southern Europe loses money, or visa versa?" Making the "big" rice pot smaller will help the employees feel that their personal benefits are better taken care of.

Caring for Partner's Interest

I once mentioned to a journalist that the "local touch" concept helps to form a basis of common interest. He disagreed by questioning, "Partnership is not equal to sharing common interest. If Acer's partner opens another company and sells to the joint-venture (JV) company, all profit goes to his personal company while the JV company loses money, what will Acer do?" A similar situation indeed took place in Taiwan before. Of course, similar cases can happen outside Taiwan as well.

So far, such a problem has not occurred in Acer, but we have made sufficient preparations.

Before finalizing partnerships, we will show our partner what we have and reach an agreement that if they have other business undertakings that have a conflict of interest to the JV company,

we are entitled to work with another company in parallel.

Next, the management team of the JV company must make an investment and form an independent management team separate from both parent companies. It must maintain a neutral position between the two so that the three companies can lay down a solid foundation. For instance, the president of TI-Acer holds TI-Acer shares and takes care of both TI's and Acer's interests.

Currently, Acer has two types of overseas partners. First, the JV partner does not run other conflicting businesses, such as Acer Computec Latin America JV with both investors each taking half of the ownership. Second, the partner is also in the high-tech industry. For instance, Acer's partner in Chile was originally a distributor of high-tech products. The JV is formed between its PC department and Acer, with the original department manager becoming the president of the JV. However, other businesses of the investor do not compete or conflict with the JV company's interest.

It is true that a partnership does not necessarily ensure the sharing of interest between both parties. But, if we manage the relationship with the view that "my benefit will be my partner's benefit," we will be able to share the benefits together. For instance, Acer empowers each regional operation with purchasing power for key components, enabling the JV company to obtain a more competitive advantage. In turn, it also generates return on Acer's investment. Moreover, for professional managers taking ownership of the joint venture, their benefit is completely built upon the success of the joint business. If they can benefit from the business, Acer will benefit in a greater way.

Up to now, we have not discovered any overseas managers getting kickbacks or unduly benefit the JV partners, as there is no channel to transfer such under-the-table benefits. If unhappily it happens, we will re-negotiate the cooperation terms with the partners. No matter what, the most important state of mind is that if we cannot protect and treat the partner's benefit as our own, our partners will try every way to protect their own benefit. Can we blame our partners if they cheat on us? If so, both parties will hold on to their own interest and fail to maintain a stable

operation for the JV company. It will end up hurting the two investors.

Of course, there are some problems with the "local touch" strategy. For instance, the partner may have a large and diversified business, and the JV company becomes relatively less important. Hence, they simply staff the JV with lower-level managers. Or, as the market competition becomes fierce, and we have to expand the business by increasing capital and sending over a vice president to assist, our counterparts do not want our involvement. These problems need to go through negotiations in order to establish a consensus and find solutions.

In general, except in very few areas, Acer has established a business relationship with our partners long before the JVs take place. Besides, Acer's management and culture has been able to stay consistent over the years; therefore there will be no significant problems. On the other hand, the advantage of a decentralized global network is that when a few member companies have problems, the rest will not be affected seriously. Since centralization does not solve the problem, and it will be even worse when a problem occurs, it is better to decentralize the organization than face fatal situations.

Relay Marathon on "Capital" and "Human Resources"

From the development of "local shareholder majority" to "21 in 21," Acer intends to further implement its localization effort by going public in each country we operate in.

It is foreseeable that the IT industry will develop into an extremely huge market. To better grasp the opportunity in the future, we must be prepared with lots of ready resources. Going public is making advanced preparations for securing resources. By going public, we can raise capital in the local market, and Acer will have the opportunity to become a first-class company in the local market and enhance our corporate image.

Also, going public helps the company attract local elite. When a company goes public, it will not become a "one-man company" or family-owned business. When top-notch talent is willing to join, the company will continue to grow and prosper. This reflects Acer's corporate culture of "relay marathon"; -- a relay of capital and human resources.

Around 1988, I often told media and journalists from abroad that Acer was famous for making computers, and millionaires. At that time,

Acer's IPO in the Taiwan Stock Exchange created hundreds of millionaires among Acer employees. Among the worldwide high-tech companies, it is unprecedented that stock ownership of a company can be so evenly distributed. In the future, Acer not only intends to bring fresh technology to everyone everywhere in the world, it also intends to make many more millionaires in other countries.

Three reasons make me believe that "21 in 21" and a "client-server" structure will create an even more promising future for Acer.

First, under the structure, each business unit is taking over the current developing and operating responsibility. This gives me more time to consider Acer's future visions.

Next, since we operate in such a delegated and independent environment, the visions I raise have to get everyone's recognition and consent. With consensus established, we have a greater chance of implementing the visions together.

Third, if we do not share a common interest, any visionary strategy I come up with will have no incentive to motivate the full cooperation of our colleagues. When Acer successfully builds up the basis of sharing common interests among its global partners, the momentum in implementing the strategies will become stronger and more powerful.

Therefore, viewing from the three levels of "vision generation," "consensus building," and "vision implementation," Acer has a greater chance to succeed in the future than in the past.

Moreover, the system that stimulates the formation and implementation of vision will continue to drive Acer forward. When the Aspire home computer was launched, I met with the R&D staff and reviewed Acer's innovation history for the past 20 years. I told everyone, "In 1984, I said Acer would develop a computer that everyone in the world would know how to use, hoping that this goal would propel Acer members to develop the most convenient and easy-to-use product. Eleven years from now when we look back, the Aspire computer will appear to be only a small first step. In the future, there are still a lot of missions for us to fulfill. Our work is not yet done, and all of us have to work harder."

The road ahead of us is broad but endless.

Comments by Stan Shih at Year 2004

- In the second re-engineering, Acer adjusted the three major strategies in the first re-engineering: “global brand; local touch” operational philosophy, client-server organizational structure, and fast-food business model. First, the local-touch policy was replaced by a model of “one brand, one team, and one company”. Second, the organizational structure, although still based on the concept of client-server, has been different. The global headquarter and regional headquarters become one single global team. Third, fast-food model of desktop PC assembly has been reduced into only a few sites or let ODM vendors in charge the work directly; while notebook PC products, relatively suitable for a model of global centralized airborne supply, had never adopted the fast-food model. . (Please refer to Chapter 1 “The Second Re-engineering in Acer” in “Millennium Transformation—Change Management of New Acer”.)

Chapter 11

“Go Game Strategy” and “Stan Smiling Curve”

My friends often asked me half in jest, “Acer is not an academic organization, why do you have so many theories?”

Many decision-makers feel that strategy formation is the sole responsibility of CEOs. They believe that employees only have to follow instructions and that it is not important for employees to know the background of a decision. However, Acer never adopts the policy of “deceiving” its employees. Under a decentralized management, in order for our colleagues to make effective implementation and react quickly to sudden challenges, we must have clear principles. This way, everyone will understand a decision clearly and can take appropriate actions.

The “Go game strategy” and “smiling curve” are both raised initially for the purpose of internal communication and consensus formation. The former has accompanied Acer for the past 20 years, while the latter one came into shape during the paradigm shift in the computer industry.

They may provide some reference for those companies and individuals who, like Acer, are in the same changing environment.

Go Game Strategy

- Straight thinking:** An entrepreneur should choose a large market to support volume production and ensure survival of the company.
- Reverse thinking:** An entrepreneur should secure a firm foothold in a niche market before entering a big market.
- Thinking logic:** In the initial stage of entrepreneurship, resources are usually limited. The newly start-up will easily be defeated by competitors in a large market. Entering a small market makes it easier to take hold of an appropriate territory.

First of all, I have to declare that by adopting the Go game theory as Acer's operating philosophy, I am not implying that I am a master of the art. In fact, I did not start learning the game until I was a college senior, and I stopped after finishing graduate school. Hence, I did not have much of a chance to develop a further understanding about this ancient Chinese board game. However, just as Acer adopts only the basic principle of "fast-food" business model and "client-server" organizational structure, we adopt the spirit and strategy of the Go game that is fitting with business operation to manage the company.

Among the various chessboard games, Go has the closest underlying principle to managing a business. Judging from its game process, Chinese chess and western chess mostly center on armed combat — beating the opponents until you have a checkmate, be it the "King" or the "General". But in the real business world, examples of self-defeat are often seen. In a game of Go, although "besieging" is one of the strategies, it does not require the eradication of opponents to win the game. Most of the time we win the game through skills of gaining territories or looking for ways to survive.

However, there are different game rules between Go and a business operation.

First, Go is a one-on-one game while in business, there are multiple competitors. Second, winning or losing in Go is often decided by the small difference in the remaining numbers of "beads", which often hurt the feelings of the players. In the business world, however, market shares may be slightly different among all players yet everybody can be a winner. Third, the boundary of a chess game is fixed; but there is no limit to the scope of managing a business. Fourth, the result of a chess game is counted by rounds, and there is no connection between different rounds. Business, on the contrary, is a non-stop competition with one stage after another.

Acer's Chinese brand name, "Hong Chi" in Chinese pronunciation, means a grand and endless game of Go.

Secure Market Share, Make Long-Term Plans

Applying the Go game theory to business management, both share many important principles.

First, secure a remote territory and wait for an opportunity to enter the main battlefield.

The starting point of a Go game is from the corner, extending to the sides, and finally stretching out to the center of the chessboard. At the beginning of the game, as there is only a limited number of beads, one must secure the corners first and gradually march toward the center. It is like the beginning of a business, it is better to start from a small niche market and capture an appropriate territory with less resources required in order to survive. If out of pride, one insists on entering a big market directly, the company will easily be surrounded by opponents and fall into a hard battle.

Second, long-term “Bu Ju” (arrangement and layout) is necessary. The Go game is different from Chinese chess. A game of Go lasts a longer time and requires complex techniques. Therefore, playing Go has to have long-term vision and an overall concept from positioning to layout (Bu Ju), to making moves at the most critical timing. Managing a business also requires long-term planning such as human resource development, corporate culture, organizational structure and system build-up. Placing Go beads at random in a Go game would definitely not achieve good “Bu Ju”. Similarly, a disorganized company will result in an inefficient operation. Hence, even though the business is small, an overall concept and implementation plan still has to be developed in order to cope with any needs that may arise at any time.

The planning capability of a professional expert is, of course, different from that of a novice. Experience is especially sought after in managing a business, as experience helps generate an overall concept of the business and helps understand how to make proper arrangement. Those joining the competition without experience will bring about inferior efficiency, and their room for survival is limited. Moreover, they are not sensitive enough to feel the change taking place in the industry. Once they find out it is too late to rectify the deteriorating situation.

Third, Go game emphasizes the skill of making “living eyes” (“huo yen” in Chinese pronunciation); and it requires at least two “eyes” to stay alive. For a company to survive, it is better to have more than two profitable products.

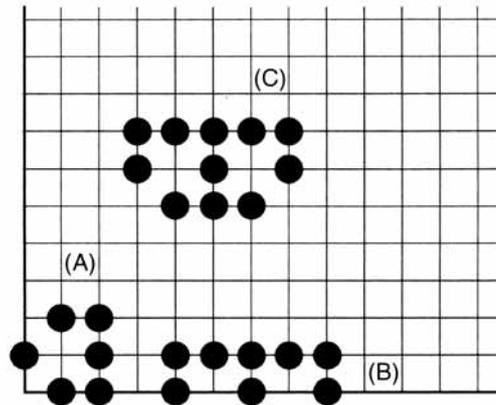
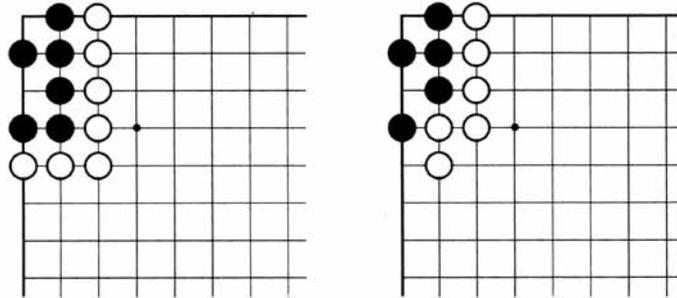
The reason Go requires two “living eyes” is that when one “eye” is besieged by the opponent, another “eye” can sustain and maintain the

chance of survival. Similarly, if a company depends on only one product to make a profit while the other products are losing, its competitors can knock out the company by blocking the single profitable product. However, if the company has more than two profitable products, it goes as the Chinese saying, "A clever rabbit has three dens". It will be too costly for competitors to beat these products one by one.

In Go, there are "true eyes" and "false eyes". If a "false eye" is not transformed into a "true eye", it becomes a "dead eye". Like various products of a company, some may seem to be making profits but is in fact losing money. This is a "false eye". Another example. If a company fails to make reserves for after-sales cost, its financial book may appear to be profitable but in reality the cost will be incurred in the future. Treating "false eyes" as "true eyes" will result in wrong decisions and weakened competitiveness.

Hence, by cultivating a "true eye", we are positioning ourselves in a flexible position from where we can either defend or attack. At that time, we need to enlarge our territory as soon as possible and make one more "eye". The reason why Acer keeps enlarging our market and developing diversified products is to create more "living eyes". Investing in new businesses with profit made from the other profitable businesses, and cultivating these new businesses into profitable ones, we are gaining more and more "living eyes".

Of course, a company can never be in favorable circumstances all the time, just like a chess player can't be in a superior position at all times. However, a professional player will place the chess piece at a point where he can defend, attack, and also be consistent with the overall plan. An inexperienced chess player, on the other hand, will inevitably be forced to make a "valueless" move in a difficult situation, which is simply wasting time.



**Left: Black has two connected eyes; they are "living eyes."
 Right: Black fails to connect the two "eyes"; they are "false eyes."
 Lower: "Surround the city from the provinces" means using the least resource to achieve maximum result. In part A, six beads is all it takes to corner two "Huo Yens" in the province (corner). In part B, it takes eight beads to corner two Huo Yens in the border. In part C, it takes eleven beads to corner two Huo Yens in the city (center).**

In difficult times, most companies will only consider how to survive. But I think it is not enough. If a company only concentrates on solving problems, once the crisis is solved, the vitality of the company is already diminished as well. In the most difficult situations, Acer not only sold assets to cope with the crisis, it also continued making investments and developing new strategies. In other words, we never give up cultivating more "eyes". It has helped Acer tide over difficulties and maintain our strength to enter another phase of high growth.

Willing to Give Up before Gaining More

Fourth, the longer the "breath" is, the less likely it fails. "Long Breath" is a Chinese term that connotes stamina and perseverance. There is the so-called tactic of "catch the big dragon" in a Go game -- both sides trying to surround the opponent. With all the Go beads connected, there is no "eye" in between. While trying to besiege the other party, the player also has to break out from an encircled zone to meet with other beads or look for greater space. The player has to be careful with each move and be conscious to hold a longer breath so as not to be surrounded.

In the real business, while two companies are competing head-to-head, they will launch special campaigns against the other competitor in attempting to knock down the opponent, just like they are playing "catch the big dragon". Maybe the outcome will be even; but as long as one can hold a longer breath than his opponent, he will be in a superior position. More importantly, so long as his breath is strong enough, the opponent would not dare to move boldly; and instead they will move and make arrangements slowly.

Therefore, "long breath" serves two purposes. First, to prevent the opponent's encirclement. Second, to retain the chance of survival when the opponent is on the offensive.

For a company to maintain "long breath", it must have low operating cost. For instance, during Acer's beginning stage, the salary of several co-founders were discounted. Even after making money, we continued to lower our operating cost. These are the measures in maintaining a longer breath. We also discovered that once becoming profitable, some companies begin to buy cars and construct office buildings. With operating costs soaring, the company loses its competitiveness. Once its

competitor adopts a price reduction strategy, the company will be incompetent and unable to defend.

Next, a company must maintain high morale. As long as the company can consolidate its morale on a long-term basis, even though the company may encounter difficulties for a time, employees can still stick together and resolve the obstacles.

On the other hand, to maintain a long breath, it is necessary to give up certain investments in time that do not have potential.

To “catch the big dragon”, the opponent will gather his beads to surround us, and we will likely lose the opportunity to develop other territories. Therefore, if we assess the situation as not urgent, we can engage in developing territories first without responding to the opponent’s attack. Once opportunity comes, we can turn back to restore the lost territories, which is a strategy of “hitting two birds with one stone”.

Hence, if the environment is not favorable for a company to make a new investment, the investment can be set aside. This way, it will reduce losses and maintain strength to shore up other existing businesses. Once the company gets stronger and more capable, it can begin investing again with a greater chance of success. If the company insists on going with the original investment, it is only a waste of resources.

Fifth, increase the chance of success through strategic alliances. Generally, a good “Bu Ju” in Go is to keep two “eyes” close together. If the two “eyes” are located on two sides of the chessboard, they will be surrounded more easily than if they are close together. It is the same with competition in the marketplace. When a single company fails to enter a market, the alliance of two companies will enable both to enjoy advantages in resource and competitiveness.

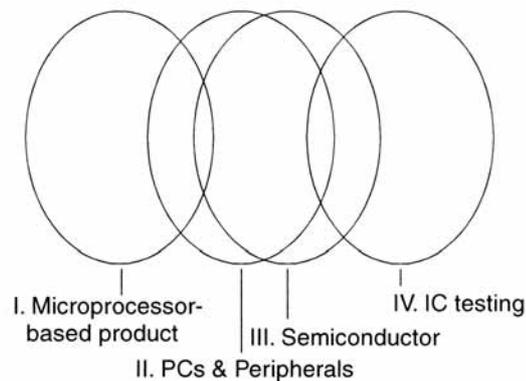
Prevent “Living Eye” from Becoming “Dead Eyes”

However, managing a business is more complicated than playing Go after all. The most obvious example is that in Go, if we make two “living eyes”, they will always be “living eyes”. In business, a profitable business today may turn into a loss tomorrow. Even for a business that is generating big profit, we need to rejuvenate and maintain its vitality. Moreover, to prevent a profitable business from becoming a losing operation, we have to continuously make new investment and make sure

there are a few “living eyes” for the company.

Here is another question. When and where does a company make “eyes”?

Acer’s diversified operation approach is an inter-related and progressive system (see illustration below). Each new business is derived from its immediate previous business, and each business overlaps with another. In other words, each operation shares the relation of support in terms of resource or capabilities.



Acer's Diversification Logic: each area is extended and developed from its previous area. The resources can be mutually shared.

If a company centers development on the first and fourth businesses as the illustration shows, there is no direct relation between the two. When the fourth business encounters difficulties, the first operation is in no position to offer support. However depending on the bridging function of the other operations in between, the two businesses have a relation. For instance, Acer has developed from microprocessor machine to PCs and peripherals. Now it has invested in semiconductors as well. In the future, Acer is going to enter the area of consumer electronics. The accumulation of strength from technological ability, marketing to capital is a stage-by-stage process that is connected to each other.

When TSMC was to be established, Mr. Y.T. Chao, then the Minister of Economics, had invited Acer to participate in the operation. However we declined as Acer’s capital was limited at that time, and semiconductor

business had less connection to the PC business. Later, when Acer had a much stronger financial capability and our PC manufacturing required a large quantity of memory, we invested to establish TI-Acer.

When Taiwan lifted the ban on opening new banks in the '90s, I declined an invitation for Acer to invest in the banking business. Whenever journalists and colleagues ask about Acer's strategy of diversified operation, I would draw the illustration of Acer's diversified business approach, and tell them my principle. The principle is too important to Acer. Without this principle, any investment aimed at diversifying the business will have justifying reasons, such as the diversification of business risk or to achieve greater profits with the new business. Although there are so many benefits, where is the capability in execution and management? Without these capabilities, we will achieve a reversed result. With clear principles, everyone can aim for the same goal without pursuing diversification aimlessly.

Maybe readers may question, since Acer insists on a diversified business strategy related to our core business, why had Acer invested in the housing project? The fact is, the Acer housing plan is not an "eye" for Acer. We do not intend to make a profit from this plan. If we had not developed the housing project for our own use, but had instead entered the real estate business and made big-scale investment, Acer would have suffered a big loss already. The housing plan, on the other hand, would not have played its role today as a base for Acer's expansion in the future.

Hence, the diversification of business is an opportunity and a trap for a company at the same time. If the company is making "eyes" here and there with no connection in between, and it also misjudges the situation, thinking it is making "living eyes" which in fact are "dead eyes", the company will be in a risky situation without the knowledge of the danger it faces. This way, the diversification not only fails to dilute risk, it will bring along greater risk.

Go Game Theories as Communication Tools

For Acer, the "Go game strategy" not only provides the basis for strategic thinking, its more important function is in building up consensus. For instance, whenever I ask our colleagues to reduce operating cost, they will argue that other companies are spending the same operating cost, and

we are not spending more than others. As a result, I have to persuade them that we have to spend less than others so that our “breath” can be longer. In fact, everyone understands this simple logic; but to implement it effectively requires deep understanding from most of the colleagues. Otherwise, it will be difficult to control the budget.

In the beginning of Acer’s globalization effort, we adopted the approach of starting from the third world countries and “surrounding the cities from the countryside”. I had even used a chessboard to explain to our colleagues that by starting from small markets, we were not giving up the big ones. On the contrary, when the number of Go beads is limited, they are easily surrounded if scattered around the chessboard. By securing the corners first and extending to the center later, we will have many “living eyes” with which we can attack or defend.

I believe this idea is different from the investment logic of most people. Why is it that we often find so many people invest in the same industry or business in Taiwan? It is because most people believe that small markets are not worth developing, and only big markets have sufficient business size to support volume production. This is why everyone is so anxious to get a share of the “big pie”. If we think in a reverse way, do we have the capability to compete in a big market? It may be a big pie, but it may be too hard for us to bite. It is better to find some edible stuff to fill our stomach.

In fact, the Japanese are most experienced in the Go game. Japanese companies often invite professional Go players to teach their decision-makers with the purpose of enhancing their wisdom in making decisions or nurturing their character. For me, I utilize the Go game theory primarily on communication. This is an unexpected harvest for me in learning the Go game.

Stan Smiling Curve

- Straight thinking:** Cost is the primary competitiveness of a company. The appreciation of currency and expensive labor cost are the major reasons of decline in corporate competitiveness.
- Reverse thinking:** Speed is the main competitiveness of a company.

Thinking logic: Speed itself is the cost. Fast speed can reduce cost, while reducing cost cannot accelerate speed.

In 1992, Acer began to promote the “fast-food” business model in full speed. However, some colleagues in Taiwan held different opinions and they were unwilling to cooperate with the change and the new working model. Although there were some achievements but it was not satisfactory.

I could understand such resistance from employees and paid considerable attention. It was like the American workers going on strike in the early years when the American companies moved their assembly operations to Asia. When Acer is faced with the same problem, it is understandable that employees will have such resistance.

To convince the Strategic Business Units (SBUs) to give up the system assembly business and focus on its expertise, I have to prove to them that assembly is the part with the lowest added value.

In the beginning of 1993, I communicated face-to-face with our colleagues. Starting from the analysis of added value on the traditional industries, and on to the change of value-added in vertical integration when the paradigm change took place in the computer industry. We concluded with a new value-added curve, which has changed to an upward curve from the original downward curve. The system assembly business, which used to have the highest value-added, has become the part with the lowest value-added.

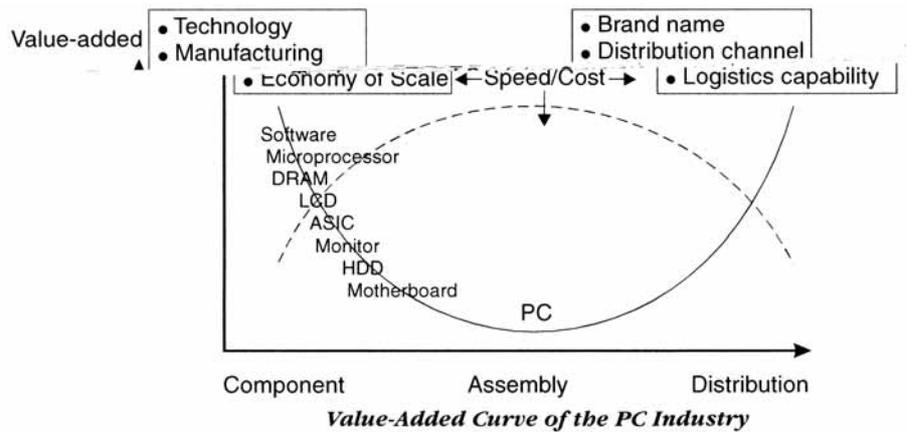
“Since the value-added of system assembly has become so limited, there is no reason in insisting on doing the assembly in Taiwan.” In order to impress our employees, I put it this way, “The consumers are buying components, and we are simply putting it together for them and provide after-service.”

While most colleagues were puzzled about the paradigm change in the industry and felt uneasy about the future, I sketched this curve and explained it to the colleagues. They understood it all of a sudden.

Later, Simon Lin walked over and told me, “Our colleagues like this curve very much. They decide to name it the ‘smiling curve’?”

In fact, this subject had been discussed internally for some time but it lacked a clear theoretical structure. Therefore, it became very impressive when the smiling curve was developed. I believe there is a close connection

between the curve and why Acer was able to greatly increase its efficiency within the past few years. It has served to convince our colleagues to concentrate their efforts and pursue the highest professional value-added without distraction.



Look for Positioning on the Smiling Curve

The basic structure of the value-added curve, from left to right on the horizontal axis, are the upper, middle and down stream of an industry, that is, the component production, product assembly and distribution. The vertical axis represents the level of value-added. In terms of market competition type, the left side of the curve is worldwide competition whose success depends on technology, manufacturing and economy of scales. On the right side of the curve is regional competition. Its success depends on brand name, marketing channel and logistic capability.

Every industry has its own value-added curve. Different curves are derived according to different levels of value-added. The major factors in determining the level of value-added are entry barrier and accumulation of capability. In other words, with a higher entry barrier and greater accumulation of capabilities, the value-added will be higher.

Take the computer industry as an example. Microprocessor manufacturing or the establishment of brand name business comes with a higher entry barrier, and requires many years of strength accumulation to achieve progress. However, computer assembly is very easy. That is why

no-brand computers are found everywhere in electronic shopping malls.

In motherboard manufacturing, except for a small number of manufacturers who develop new technology to quickly introduce new products, most others simply use the standard board supplied by chipset manufacturers, and they are only responsible for inserting components. Hence it is at the lower left side of the smiling curve.

To stay competitive, manufacturers of key components such as LCDs and memory chips require large capital and high level of manufacturing capabilities. Therefore, they are at the higher left side of the curve.

Based on the different modes of each industry, we can develop different value-added curves for different industries.

Take the shoe business as an example. The part with the highest value-added is marketing. Nike and Adidas are in this group. The next level comes the production of raw materials, with the PU and PVC man-made leather manufacturers in Taiwan as the model. The lowest value-added part is at the shoe factory. Hence, most Taiwan shoe manufacturers have moved their assembly operations to Southeast Asia or Mainland China.

In the consumer electronics business, the value-added of manufacturing and marketing are about the same, while that of the component is low. The manufacturing of semiconductors is a typical capital-intensive business, which brings along the high entry barrier. The marketing side comes easier, while design is the easiest (except in memory chips).

The petrochemical industry has a curve with both sides downward. Take Formosa Plastics as an example. Its raw material is not expensive. The products are sold directly to manufacturers, which do not need special investment in promotion or marketing. However, the manufacturing process requires large investment. The difference between its curve and others is that the petrochemical industry is vertically integrated, not disintegrated.

The value-added curve not only can be utilized in the decision-making process of large companies, it can also be used in small-scale investment. One can consider whether the business he is in is a vertical integration mode or disintegration mode? Where is the value-added? Where is his unique positioning? Do customers like it? These are the ways to find where the value-added parts are. In the computer industry curve, one can

still find many niches on the curve, such as giving training courses and providing after-service for manufacturers.

Maybe some experts will think that without any curves, they are still doing fine with their business. But, this curve also plays an important role in communicating and reaching a consensus within the organization. Especially when a company is facing difficulties, not only does its decision become more convincing, all employees will take a more unified position to cope with the challenge.

Where is the Beef?

I derive several conclusions from the curve.

First, a curve will change with time, hence a successful model in the past may not be applicable in the future.

Just as the opening-up of industry standards by IBM helped pulled down the high value-added of computer assembly, the car industry, which used to be the most profitable industry in Taiwan due to the government's protectionist policies, has begun to suffer serious losses due to market liberalization. People have now concluded that the Taiwan market can only support three to four auto assembly plants. It is impossible for them to compete with large-scale manufacturers abroad. In other words, the auto industry is also beginning to show a smiling curve trend.

Under this circumstance, I think there are two solutions for Taiwan's auto industry. First, maintain an effective operation on marketing and distribution which is on the right side of the curve. This part is regional competition, and the local manufacturers have more advantages over the foreign manufacturers. Second, start investing in components for after-sales service. It can promote key component production on the left side of curve, and achieve a business size and quality with world-class competitiveness.

Many people have raised the idea of turning Taiwan into an international auto parts supply center. In fact, if car manufacturers adopt a disintegration mode, such as Mercedes Benz and BMW focusing on engine development, maybe they can derive good profitability like Intel. However, unlike computer companies, car manufacturers take on all work from beginning to end, hence they are not able to reflect a reasonable price along with improvements in technology.

A board member of one large Japanese company mentioned to me that as automation had limits in increasing assembly efficiency, and the shipping cost of cars was high, Japan's auto industry would focus on developing key components in the future and move car assembly offshore to the marketplace. Hence, the disintegration mode of auto industry is expected some day.

Second, under the disintegration mode, there is no country or company that can do everything well. As each country and company has various levels of capabilities and resources, they have to concentrate their resource and strength on a few designated fields. After the capability is built up, operation can be expanded to other fields. Just as it is necessary to establish a beach head during a war, if you attack on all fronts without focus, the result is an army in disarray.

Hence before entering an industry, we have to understand the ins and outs of the industry, ask "where's the beef?", in other words, where is the profit? Otherwise, blind participation in every industry will result in the loss of corporate competitiveness. Hence I often say that, "If you enter the computer industry without understanding the smiling curve, you won't be able to smile."

For example, when Intel started to engage in the production of motherboards and PCs, many manufacturers got very nervous. But I don't think the situation is so serious. From the smiling curve, we know that the production of systems and motherboards almost generates no profits at all. Most people still have the impression that manufacturers of systems and motherboards have a higher image level, but in fact, motherboard manufacturers are confined by the microprocessor and chipset manufacturers. Furthermore, viewing from Taiwan's statistics, the sales revenues and profit numbers of motherboard manufacturers are not much (its revenues are only one third of monitor manufacturers). But due to our age-old impression, motherboards appear to be the representative product for Taiwan's computer industry.

Since the profit margin of system and motherboard production is so low, if Intel really desires this market, it's not a big deal to let them have it. In fact, Intel already controls the motherboard industry through their microprocessors. For Taiwan, it has been worthwhile that the involvement in system and motherboard production has also promoted the development of color monitor and semiconductor industries. Of course, as

Taiwan has already taken such a large market share in motherboard production, it should not give it up easily.

Another prime reason why Intel got into motherboards and PCs was to promote their microprocessor and chipset business. If Intel wishes to enlarge its business scope, the marketers on the right side of smiling curve will be the ones that are hurt most as marketing requires differentiation and variation. If Intel is to take an aggressive approach in the motherboard and system business, it indicates they will have a deeper control in marketing, which will hurt manufacturers like IBM and Compaq. It is hard to predict what results will be generated by this approach.

Speed and Cost are the Deciding Factors

Thirdly, the left side of the curve is key components production with its three key success factors: technology, manufacturing, and economy of scale. Economy of scale is the most important of the three. Meanwhile, among the three factors on the right side that will affect the results of marketing: brand name, distribution channel and logistic capability, logistics is the winning key.

Judging from the current development trend, the differences among manufacturers in the remaining four factors are getting less significant. Moreover, the new IT age is a competition of speed and cost. With greater economy of scale, cost will be lower; with better logistics, the cost will be lower and speed even faster.

Between speed and cost, however, speed is even more important, as speed itself is part of the cost. Faster speed can lower cost, which in turn will result in faster product turnover, lower inventory levels and accelerated cash turnover. Lowering costs, however, will not necessarily increase speed.

This is a very important concept. Over the years, many in Japan hold the opinion that Japan's declining competitiveness was due to the yen's appreciation and the increase in prices of commodities, which accelerated corporate spending and decreased profitability. In an interview during my visit to Japan in 1994, I pointed out that this was an incorrect understanding. I believe the decline in Japan's competitiveness should largely be attributed to its slow speed which results in high operating cost.

That interview received tremendous feedback, and Japan has become the area that the “smiling curve” enjoys the highest popularity.

Fourth, since economy of scale is the winning factor for component manufacturers, companies that intend to enter the business must be mentally prepared to “go big or go home”. In other words, unless there is the chance of becoming the leader in a chosen industry or niche, the company might as well give up.

Years ago Acer decided to give up the production of power supplies and communications products, precisely because we recognized that we were incapable of becoming the leader. Concentrating our resources enabled us to take a leading global position in other fields: No. 3 in monitors and No. 5 in motherboards. CD-ROM will soon make it to the top five list. Before Intel got involved in the ASIC production, ALI was the world’s third largest ASIC company.

Economy of scale is even more important to software companies than it is to hardware companies. Take Microsoft as an example. Its R&D investment in operating system software is certainly no less than IBM’s investment in mainframe operating systems. However, mainframe OS costs about US\$100,000 in the past, while Windows NT costs only several hundred with even more powerful functions. The power of economy of scale in the software industry is therefore very significant.

Assuming I spend NT\$100 million to develop a CD-ROM title, while our competitor only invests NT\$10 million, the high-quality software that can be developed with the \$100 million definitely has a greater value than that of the \$10 million investment. The sales volume it creates may likely be dozens of times that of the \$10 million investment. If the unit price is \$100, as long as a sales volume of one million CDs is achieved (not a difficult target in the U.S. market), the investment can be recovered (as the reproduction of software requires almost no cost) while customers only have to spend \$100 to enjoy it. Hence, companies with small production budgets almost has no room to survive.

This does not mean that a small company can never survive. If a company does not have enough resource or capability, it can first enter a niche segment and be the leader in a smaller pack.

For instance, if you are only capable of operating a small-sized software company, it is not necessary to enter a billion-dollar market and compete with giant companies. In a market segment of about tens of

millions in size, an annual sales revenues of \$3~5 million can make you a leader in that segment.

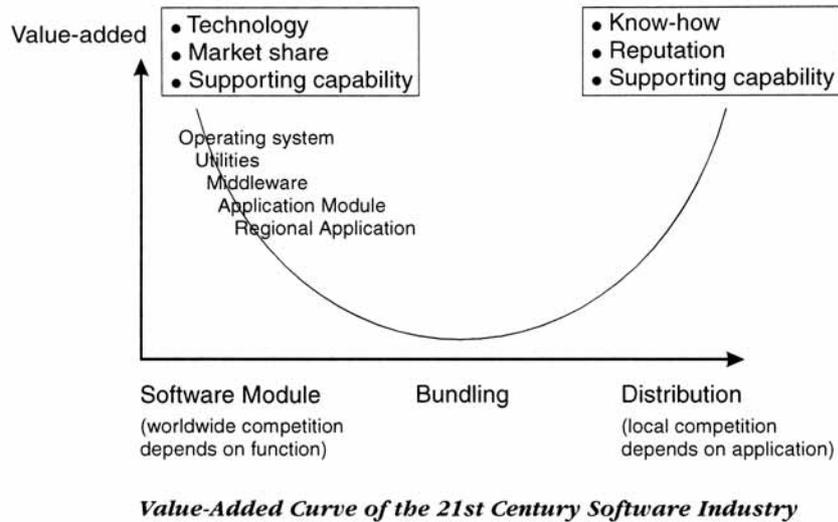
Fifth, marketing is a regional type of competition. To excel in international marketing, you must have localized strategies. Marketing, the right side of the smiling curve, used to be the Achilles heel for Chinese companies. Especially Mainland China, after years of planned economy, its marketing capability has become very weak. How to uplift marketing capability is therefore an important subject. As marketing is regional competition in nature, even a large company like IBM cannot win them all by winning in the U.S. only.

Acer's "local touch" was developed from this viewpoint, with the aim to effectively compete with powerful rivals through cooperation with local players. As the theoretical foundation is in place, our colleagues no longer question "how can we possibly beat IBM?", and are able to concentrate on managing the local market.

The "smiling curve" not only holds true for the computer industry, it is also applicable for the software and consumer electronics industry.

Today's software industry (see illustration) has its highest value-add in system integration, and the representative company is EDS in the U.S. This business requires professional know-how and has greater complexities, hence its value-added is the highest. System integration is difficult to achieve because the level of standardization is still not enough, just as each computer company had its own proprietary operating system in the past. It is disadvantageous to customers in terms of the level of convenience and the effectiveness of resource utilization. Some day, software, like hardware, will gradually develop towards an open direction. OS and software interface will also have a standard so that they can be integrated together easily, just like microprocessors and memory assembled on a motherboard.

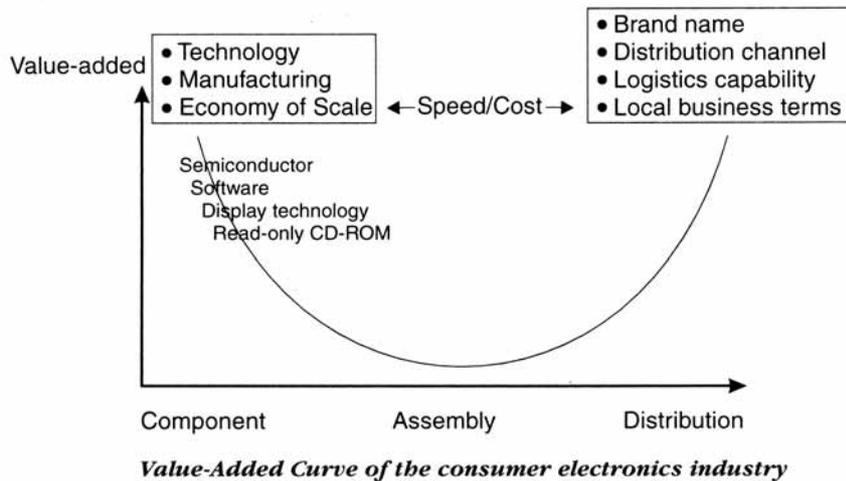
By then (I estimate within the next ten to fifteen years), software will not be organized in a way of system integration as it is today, instead a large volume of standardized software will be integrated. Its value-added curve will then be high on both ends and low in the middle.



Entering the Consumer Electronics Industry

The revolution of consumer electronics industry will arrive earlier than in the software industry.

In the past, the consumer electronics industry, led by Japan and Korea, has maintained a vertical integration mode. However, as consumer electronics gradually moves towards integration with PCs and communications products, it will develop into a disintegration mode. With the "invasion" of PCs, the high value-added nature of assembly will gradually decline. I estimate such change to start taking place after 1997. After 2000, the value-added nature of the consumer electronics industry will also demonstrate a "smiling curve" (see illustration below). On the left side of the curve will be components like semiconductors, software, display technology and CD-ROM drives.



Acer has started initial forays into the consumer electronics market, and has set it as a goal for Acer's third phase of start-up. Evaluating our current qualifications, we already have semiconductors and CD-ROM drives. In firmware (like BIOS, software that is integrated with the hardware), Acer is one of the leading vendors in the world. Our display technology is backed by the four million color monitors produced annually by Acer Peripherals (this number is large enough to enter the top ten TV manufacturers). Acer, in fact, is already equipped with considerable competitive foundation.

On the marketing side, we have established a worldwide "local touch" distribution network. The introduction of Aspire has also helped Acer to enter the distribution channel for consumer electronics and has served as a good foundation. In terms of brand awareness, though Acer is less well-known than Sony, we are able to compete with Sanyo and Samsung. Our 34 assembly sites worldwide is the most effective weapon in Acer's logistics arsenal. The only immature condition is the commercial environment in each market, such as cable TVs, software industry standard and network integration. As the progress in each area is different, it may take some time for further advancement.

Some people are conservative about Acer's plan to enter the consumer electronics business. They doubt that Acer has the capability to compete with a giant like Sony. Of course we are unable to predict the outcome of such a competition. However, if we look at history, when IBM "owned" the worldwide market, wasn't Compaq a nobody?

Determined to enter the consumer electronic business, Acer is committed to become the "Compaq of the consumer electronics industry of the future".

*Chapter 11***Comments by Stan Shih at Year 2004**

- My Go-game strategies are still valuable references for the corporate long-term operation, especially while an enterprise just built. For example, a company keeps diversified and cannot effectively dedicatedly operate that is equal to continuously expand the battlefield. In a Go-game, any action cannot ensure the zone would be alive that is an ineffective operation.

- “Stan’s Smiling Curve” theory has been well-recognized internationally in a variety of industries. In addition to the IT industries, consumer-electronics, and software industry, the similar development has been seen in semiconductor, digital learning, and agricultural industries. All the industries and companies should go toward the both ends on “Stan’s Smiling Curve”. That is, to enhance the research and development, and marketing, so that the corporate value can be generated. I had also designed two value formulas: corporate value formula and brand value formula. (Please refer to Chapter 8 “Creating Brand Value” in “Millennium Transformation – Change Management of New Acer”.)

Chapter 12

Cultivating Talents and the “Passing of the Baton”

Acer history is made up of a series of partnerships. Partners have always been our most precious asset.

Rich men often start a business with the mentality that they can hire anyone they want anytime. In contrast, Acer was started by a group of “poor young men” with limited resources. Hence we deeply treasure each and every partner. We all agree that we will not be able to achieve our goal without the help of many partners, and we are willing to make long-term contributions in developing more human resources.

Today, our resources are no longer as scarce as before, but we still firmly believe that the cultivation of talent is the driving force of a company’s continuous development. It is also the most important mission and contribution a company can make to society.

Cultivation of talent is an investment that does not show returns in a short time. I am very appreciative of the fact that I have a group of partners who share the same ideals. It is relatively easy to persuade ourselves to implement our ideals. However, if people around us always hold opposing opinions, it will be difficult for us to hold on to our original ideals.

Me and My Partners

- Straight thinking:** Turning over leadership is a crucial task. We need to choose the best timing to turn over the leadership.
- Reverse thinking:** Turning over leadership is a crucial task. We must implement it every day.
- Thinking logic:** Without empowering and developing human resources, how can we find our successors?

“It is easy to go through difficulties together but hard to share the riches together.” This is the Chinese view of partnership. Partners may have gone through extreme difficulties together, but when it comes time to share successes, they almost always end up adversarial due to unbalanced sharing of the profits. Edward Chang, who established Acer America together with us, was similarly advised by his father-in-law.

I could never agree with this “warning” which I have heard since my youth. Hence I am cautious not to make the same mistake. From “verbal agreements” to establishing the basis of sharing common interest, I hope to successfully develop a way different from the norm — to start a business together and to enjoy the success together.

Even today, many international media find it interesting to report the “embarrassing” early days of Acer: Ken Tai had to ride an old motorcycle for a good two hours from Taipei to Lungtan to get business; Fred Lin lived in the office; while my wife Carolyn Yeh scrubbed the office floors before the visit of AMD guests.

At that time, Jonney Shih, Simon Lin and K.Y. Lee, all of whom had brief working experiences, together with fresh university graduate William Lu, became Acer’s earliest employees. They started out as junior engineers and grew together with Acer. Gradually they were able to stand out among their peers.

We were consciously building Acer into a fine working environment in which there was no discrimination, be it family background, nationality or education. By 1982, Acer had already established its reputation in the career market. A batch of young men who once worked in the home appliance industry decided to join Acer, including Terry Liu (presently president of Acer Market Service in China) and Scott Lin (presently associate vice president of Acer Sertek). Between the passing down of different generations, Acer was able to gradually build up its management team.

First Generation Moving Behind the Scene

During 1988 and 1991, Acer recruited a large number of managers from outside to expedite its globalization. Unfortunately we slumped into a slow growth period, and some of these executives left, one after another. Those who stayed with the company have gradually matured to become

second-generation successors.

These successors all achieved tangible performance in the early stages of Acer. Fortunately they did not have to take business responsibilities at the time when the company was going through a transformation. Instead they acted as “shadows” to first generation managers and learned about leadership on the side while the company was going through its most challenging stage. Upon taking over, they were able to bring the company back into profitability immediately.

Today, Acer has the most outstanding management team in Taiwan's high-tech industry, including first-generation Acer employees such as Acer IPB president Simon Lin; Acer Peripherals, Inc. president K.Y. Lee; Acer Computer International president William Lu, and others who joined Acer later such as Acer Sertek president J.T. Wang; Acer Europe president Teddy Lu; Acer America president Ronald Chwang, and TI-Acer president Alex Cheng. Their average seniority in the Acer Group is over 14 years. I am proud to say that their operating and management capability is better than mine. When I was their age, the business size I managed was not as large as theirs today.

Even though Acer is now very successful, we never stop cultivating more successors. During the Acer Summit Meeting in 1995, I specifically reminded our second-generation successors to start cultivating the third- and fourth-generation successors immediately. Even amidst their busy schedules and heavy workload, they should not put aside the cultivation of successors.

While the company was passing down authority to the second- and third-generation, first-generation partners took on new roles.

In 1994, Ken Tai left Acer to become the vice chairman of Umax and later established a company on Internet business in the U.S. Over the past two years, first-generation executives such as George Huang (Acer's SVP and corporate controller), Fred Lin (chairman of Ambit Microelectronics), John Wang (chairman of Acer TWP Corp.), and Jeff Chen (chairman of Acer Sertek), have gradually moved to the background and played consulting roles. As this is the trend, if first-generation executives were not able to enjoy the “transfer of power,” they will inevitably feel that there is no room for further personal growth within Acer.

Over the past twenty years, we lost some talented people, but there were also a lot more who chose to stay and commit to the same Acer

ideals. However, if those who stayed were not capable while the most capable ones left, Acer could not have possibly achieved what we have today. In other words, Acer has a group of people who do not just preach but actually implement what they believe. This being the case, I can continue to perform my role and identify the next goal for the company.

A Culture of Learning, Sense of Responsibility

Most people judge a company's commitment to human resource development based on the number of hours training courses are offered and how much budget is allocated. The Acer Institute of Education (AIE) is the unit in Acer responsible for conducting all formal training. We also cooperate with IMD in Switzerland, MIT in the U.S., and the National Chengchi University in Taiwan on training senior executives. However training courses are only supplementary in nature. In Acer, we believe it is far more important for us to nurture a total-delegation environment wherein employees are motivated towards self-learning and self-growth. This also stimulates and results in more proactive experience and opinion exchanges among executives and their subordinates.

To cultivate a learning environment for employees, the most important method is to pay "tuition" for employees. To justify "tuition payment," Acer adopts two long-term resolutions. First is to include a "sense of responsibility" into our corporate culture. We learn that people who avoid responsibilities usually have inferior learning capabilities, and we cannot afford that. Second is to motivate employees to contribute out of their own free will, and must be rewarded for their contributions. This is the basis for the "common interest" concept.

To successfully establish a corporate culture that upholds a "sense of responsibility," executives play very important roles.

Most office workers have similar experiences. When errors are made, bosses often scold employees, "Haven't I told you before? Why do you still make this kind of error?" Obviously such a communication model does not work positively. In most cases the subordinates will try to weasel out of it and tend to shy away from responsibilities in the future. Also, he can get away with not "owning" a problem, because in any organization, no individual can be held accountable for any one policy a hundred percent.

To encourage employees to self-review, executives have to examine themselves first. Assume that in an incident, the subordinate has to take 70% responsibility while the boss has to take 30%. If both parties decide to shirk responsibility, it ends up with no one taking responsibility. However, if the executive takes up his responsibility, the subordinate will also be willing to take his share. Both parties can then have a frank discussion and make necessary improvements.

I believe Acer is doing a good job in this regard. Most employees are not scolded or fired for mistakes they made. This, of course, depends greatly upon the personality of our executives. I consciously set myself as a model for our executives in this regard.

Besides being responsible for the company's operational success or failure, a corporate leader needs to sacrifice his own benefits, take care of the partners, and reduce conflicts to the minimum. There may be personal friendship among colleagues, but business interest may generate conflicts among different units and departments. We discover that when a company is in a bad situation, the sales department would blame the production department, who in turn would blame the R&D department. When business turns favorable, all the departments will strive to take credit. To avoid internal conflict, a leader has to make sure "everyone is rewarded appropriately."

Policy announcements alone cannot make things work. There must be practical actions. When a department shows better performance than others, all other departments are to be rewarded to encourage teamwork.

Since Acer was small, we have tried to create an environment in which nobody strives to take credit or shirk responsibility, and we work hard to make it a habit for the organization. To move things forward and achieve team spirit more easily, a leader not only has to take care of the employees, but also has to be alert at all times. Besides maintaining frequent communication with employees, a leader also has to take pragmatic actions such as salary increase, promotion, and project assignment.

Equal Emphasis on Both Harmony and Performance

However, a company cannot turn blind to performance indicators for the sake of harmony. There must be balance between the two.

To minimize conflicts and make everyone feel good. We had some misleading concepts for a period of time. In the late '80s when Acer was in a stage of high growth, we often tried to boost morale by giving promotions as a reward to employees. Large numbers of promotions resulted in no clear distinction between reward and penalty.

The issue was discussed seriously during Acer's renaissance meeting, and we decided to revert back to our organizational habit of "be responsible." Today, Acer still maintains the spirit that "Everybody should be rewarded." However, the arrangement of positions and assignments varies depending on individual performance and contribution.

The implementation of such equal emphasis on harmony and performance has matured over the years. Now Acer has set up a standard system for personnel promotions. The person involved is notified between the third and fourth quarter every year so that a preparation lead-time is at least three months. Upon formal transfer the following year, all actions and plans had been arranged accordingly.

In Acer, one way we cultivate our employees is to create a delegating environment for them to learn and grow. Second-generation executives who have taken over control were nurtured and cultivated gradually over time, and so would the third and fourth generation executives now undergoing training. While this method may not be aggressive enough, on the other hand, we have to let our executives take the initiatives to look for successors.

Cultivating a "Scapegoat"

In Acer, one of the most important considerations in promoting an executive is whether there is an appropriate candidate to take over his position (we use the term "scapegoat" in Acer). If not, we will call off the promotion. Hence for their career development, executives have to cultivate their subordinates aggressively.

Of course, some executives do not like to lose control. These people suffer three disadvantages. First, he cannot fit in well with the organization. Second, if he is too busy and unable to delegate he will likely fail to accomplish his goals. Third, he would not be eligible for promotion if he does not have a successor. From the company's perspective, as long as this type of manager continues to enjoy his job, it is not a big loss for the

company to keep him in his post.

Of course, a corporate leader has to play a leading role. If I treat the "transfer of power" as something I enjoy, other executives will feel that what I enjoy is a contribution of their hard work. If they want to enjoy as I do, they will have to delegate and cultivate "scapegoats."

Besides physical demonstration from the corporate leader, there must be a clear declaration of policy. During Acer's Group-wide Vision Communication Meeting held in January 1995, I first raised the concept "to realize Acer's dreams, there must be no central decision-maker." This clearly demonstrated the spirit of Acer's decentralized management system and my determination to enjoy "loss of power." The role of a corporate leader will change as time progresses. The important realization is that we should not be the only actor on-stage winning applause. Instead, our emphasis is on how to let the play continue.

In conclusion, be it the cultivation of an empowering and responsible corporate culture, a promotion system with a scapegoat mentality, or the creation of an environment to enjoy the transfer of power, all are part of the preparation for Acer's long-term growth. We will do our best to make it a "long-term" advantage.

Creating Common Interest

An employee stock purchase program has become a common system in most of Taiwan's high-tech companies. However, some corporate leaders in the Hsinchu Science Park lead the pack in speculating unlisted stock to create a price delta, hoping to attract and keep employees through such short-term benefits. These employees will still sell their stocks and depart if the company is not doing good. This is not what we wanted.

When Acer went public, we set the rule that employees leaving the company prematurely had to sell their shares back to Acer. (We have an open and fair trading system. See chapter 13.) Although some employees eventually sold their shares, the situation is much better than other companies. I believe that most Acer employees will not trade their Acer shares for short-term cash as they share a long-term vision with the company. The same employee stock option system, when used in pursuit of short-term or long-term benefits, will generate completely different results.

People often ask me when I will turn over the leadership. My answer is Acer is turning over its leadership all the time. The reasoning is simple, we are developing human resources at all times.

We found that even across two generations of executives, though different in personalities and style, their recognition towards the concept of “Acer 1-2-3” and the four pillars of the Acer corporate culture are basically the same. This is the result of our long-term cultivation and focus.

Passing the Leadership Baton is Not Difficult

- Straight thinking:** For the benefit of the company, ourselves and the next generation, entrepreneurs should pass down the company to the next generation.
- Reverse thinking:** For the benefit of the company, the next generation or the individuals, entrepreneurs should pass down the company to professional managers.
- Thinking logic:** For employees, they deserve development opportunity after many years of contributing to the company. For the next generation, they should not bear the burden of managing the predecessors. For our own benefit, we should pick the best candidates to manage the company.

What would you do if your subordinates want to move to another company?

I often heard complaints from business associates that the right-hand man he spent so much time and effort to train left the company, and there was no capable successor. Similar problems occur when a company is full of ambition to expand, but has no appropriate talent to take on the responsibility. Two extreme statements can be used to describe such situations. The boss would complain about the lack of loyalty from employees, while employees would accuse the boss of being unwilling to train people.

I believe both are problems. If the first-generation executives are not willing to retire, what can capable employees do except change employers? On the other hand, if your capable employees are not committed to

making further developments in the company, what can you do?

In my opinion, if the boss has done his best but the employee still insists to leave, the boss can only face the reality. If the departure is because the boss does not take care of his employees as well as others, then this is a problem only the boss can overcome.

Whose Fault is it if Employees Want to Leave?

I remember a discussion I had with K.Y. Lee during Acer's early days. K.Y. and I were on our way to Chang Hwa (a southern city in Taiwan) to promote the microprocessor business. During the long drive, I told K.Y. that as a corporate leader, I have to try my best to retain my employees. If they still choose to leave, I cannot complain. Instead I have to do my best to improve the company so that they will regret their decision.

I believe that we have achieved this. Comparing employees who entered the company at about the same time, those who stayed usually are better rewarded in terms of the business size they now handle and opportunities they enjoy.

Most importantly, we are never discouraged in our efforts to cultivate employees due to employee departure. Of course, we encountered much frustration during the process because as the company gets larger, there is a greater chance of losing some talent. However as long as we continue to improve and grow, there will always be people who are willing to stay or join us.

From another angle, if employees depart because they feel their capabilities are not fully utilized, it may be an indicator that the company's growth has slowed. An organization is like an organic system composed of many human beings. As long as the employees' capabilities keep growing, the organization will be full of energy. If the growth of employees exceeds that of the organization, energy not used up will turn into fat. On the contrary, if the growth of the organization exceeds that of the employees, we will need to recruit managers from outside. The best condition would be mutual growth of the company and its employees, while newly-recruited executives act as a supplementary force. So long as the company continues to grow, every individual will have a chance to take on important responsibilities.

Hence the most important mission of a corporate leader is to maintain continuous growth for the company. If the company stagnates, the leader has to retire.

Regardless of how brilliant his performance is, I believe that the most important responsibility of a corporate leader is to cultivate talent and retire at an appropriate time. It is understandable if he cannot retire within a short time as there is no successor available. However, if he still cannot find a successor after a long period of time, it is surely an excuse. A corporate leader who cannot cultivate a successor is not qualified to lead the company.

Why is it So Difficult to Turn Over Leadership?

If an executive thinks that training does not pay off as the employees will leave sooner or later, I think this results partly from a lack of confidence and effort on the employer's part. A more important reason is that the corporate leader only thinks of the short-term benefit.

Even today, many of Taiwan's first-generation corporate leaders are well over seventy, yet are still deeply involved in daily operation. Their children, though having served in the company for more than thirty years, are still unable to take over. In some cases, though the second generation has formally taken over, conflict of interest still happens between young corporate leaders and old veterans of the company. In my opinion, regardless of whether the company is to be managed by professionals or our own children, the direction to cultivate successors has to be set early and the preparations made.

If the corporate leader decides to turn over the leadership to his own children, he will have to train them and delegate sufficiently. If he decides to entrust the company to professional managers, he also has to make up his mind early enough and develop appropriate human resources.

The difficulty in handing over leadership is that it requires at least ten years to cultivate a successor. If the corporate leader is always hesitant to delegate or cultivate, he will still face the 10-year lead-time requirement any moment in the future.

This issue does not present any headache to me. More than ten years ago, I decided not to let my children work for Acer.

For most Chinese, the reason to work diligently is to create a better environment for our next generation. Moreover, people may think that after working hard for most of our lives, it would be a big loss to turn the company over to the hands of “outsiders.”

However, I believe that for the benefit of our employees, or my children and myself, the company should best be entrusted to professional managers.

For those capable employees who have contributed to the company for so many years, it would be unfair not to offer them more room to develop.

For my children, it would be unfair and painful for them to manage so many “aunts” and “uncles” who have much stronger professional knowledge than they do.

For myself, to maintain the company’s vitality and to protect my own interest, I will naturally choose the best people to manage the company.

Of course, every corporate leader holds different viewpoints on this issue. What I want to emphasize is the concept of “investing in the future.” That is to say, any achievement in the future is the result of a long-term investment in the past. The same reasoning applies to the successor issue.

When a company is profitable, it is the best time to pay “tuition” and learn from mistakes. If a corporate leader is not willing to nurture long-term strength, he will surely not allow second-generation executives to take over as he is usually more experienced and intends to make the right decisions in order to make more money. If second-generation executives are not trained at a time when the company is capable of handling risks, how can they be given the opportunity to learn when the company is losing money? As such, how can their capabilities improve?

Always Prepare for Sudden Needs

Before corporate leaders can turn over leadership, so many actions have to be taken such as concept build-up, talent recruitment, environment setup, delegation and tuition payment. With so many pressing needs, some readers may wonder which should be on top of the list? Or should all of these have to be taken care of at the same time? The fact is, none of these actions are so urgent that they require immediate implementation. However, it is important to realize that there is no

difference in doing them either today or tomorrow, what matters is that we have to be ready when the time comes.

However, as these actions are not so pressing and may not show their effects in a short time, most people may decide not to implement them at all. This is a trap in the decision-making process.

Personally, these actions have become a habit and I am implementing them anytime anywhere. Regardless of the occasion, even if it's a casual chat with one of our colleagues, I will add some "enzyme" in our conversation, and the "enzyme" may take effect several years later when he is making a decision.

I also make use of public occasions to promote these concepts and avoid joking about them in private, which may confuse the basic belief.

With the implementation of the client-server organization structure, there are more challenges on whether such a structure may work. What if one day all the first-generation executives retire, how do we pick a leader from the second-generation executives who have similar qualifications of experience and capability? This is certainly a question.

From my point of view, The Acer Group is now a loosely-knit organization, with all the business units operating independently. In the future, the second-generation executives can take turns to act as leaders to coordinate the general direction for the group and initiate recreational activities among partners. If turning a giant organization into five smaller organizations is most beneficial for our customers, employees and shareholders, it makes no sense to insist on stitching all these units together. To be truly responsible to society, what we pursue should be the maximization of long-term benefits instead of building the corporate leader's authority.

Changing our viewpoint, it may not be easy to find someone to manage a group with billions of dollars in sales revenues. However, it is relatively easier to find five candidates to manage businesses of \$1 billion revenue each. The advantage of a decentralized organization is hence apparent.

"Sharing" is a very important concept when running a business. We have lofty goals to pursue. However business goals cannot be achieved without sufficient talent and capital. Hence, we must have ways and concepts to help us accumulate the resources required in achieving these goals. Once we accept this reasoning, we are less likely to view sharing

successes with employees as a loss or sacrifice. Gradually these concepts will prove rewarding and we can be better convinced that our insistence is correct. As such, we will not doubt the nature of our basic belief even in times of difficulty as they have been proven to work. All we have to do is adjust our thinking pattern based on the original foundation.

I believe most employees anticipate the opportunity to learn and own the company together. Acer's only difference with other companies lies in our recognition of such anticipation and in our actions to make it happen.

I once saw my wife interviewed on TV. She mentioned that over the past 20 years, our percentage of share in Acer has continually become smaller, but the total number and value of our shares have become higher. "Sharing ownership with others makes us wealthier," she said. Most people may not be able to figure out this simple logic, but I believe every executive in Acer shares this deep belief.

Sharing helps us gain more.

*Chapter 12***Comments by Stan Shih at Year 2004**

- “Passing the baton” is the critical element for Acer family group to be able to continuously expand. During the two times of re-engineering, Acer had cultivated the new-generation successors in addition to the change of operational strategies. Not just on my top-executive level, every organizational manager cultivates his or her successors. This is “passing the baton”, generation after generation. I have been promoting experience-sharing and the results are implemented step by step. After my retirement, I will extend the fields of “passing the baton” to outside Acer family groups. (Please refer to “Conclusion—an Abundant Trip” in “ Millennium Transformation—Change Management of New Acer”.)

Chapter 13

Being A Winner Who Knows How to Concede Defeat

Over these years I watched numerous companies go up and down, and the same situation has also happened to myself. I cannot help but feel that opportunities often create heroes but opportunities cannot create a sound company.

The late 0s marked the dawn of Taiwan's computer industry. When the Taiwan government banned electronic game machines, manufacturers were forced to turn to the production of "Apple II," which brought about Taiwan's computer industry. A large number of college-graduate entrepreneurs had sailed the tide to become shining stars of the industry. But most of these companies eventually fell by the wayside.

Reviewing the history, many people attribute the failure of these companies to the educational background of their corporate leaders. They believe the reason Acer is able to go through crises was due to my master's degree in electronic engineering. However I think the educational background of a corporate leader has nothing to do with the company's performance.

During my six years in the university and graduate school, half of my time was spent making new acquaintances and participating in extracurricular activities. Running a business over the past twenty years, however, was an effort requiring my full concentration. The time and resources I spent between the two is not comparable.

I believe the reason that Acer can overcome all the difficulties and get even better than before is because of our dedication over the past two decades in three areas: To create a fine operating environment, to learn from past lessons, and to contribute to society through the pursuit of ideals. Over this process, we have paid a considerable price and have accumulated experience. By sharing these lessons, I hope to bring some added-value to the readers in terms of saving them time and money while managing life and business.

Creating an Effective Management Environment

- Straight thinking:** Seeking capital injection when needed, a company must sell shares at the highest price possible.
- Reverse thinking:** Raising capital by diluting shares is a normal practice and is best done when profitability is good. A reasonable share price allows investors to have room for profits.
- Thinking logic:** When a company is financially strapped, or if the share price offers no room for profits, who would want to invest?

Many years ago I made a commitment that if Acer failed to achieve 15% annual growth for three consecutive years, I would take an early retirement so that our colleagues would have more room to develop and take on bigger challenges. If the operation was not in good condition, I would offer my resignation. In 1992, the time had come for me to carry out my commitment. I formally tendered my resignation at a meeting of Acer's board of directors.

By that time, I had spent sixteen years growing together with the company as a corporate leader. We had gone through stages of building up brand name and globalization. It was indeed difficult to make such a decision. But, to maintain the company's vitality and to keep my commitment, I was willing to take up my responsibility.

However my resignation was not accepted by the board of directors. They reasoned that Acer's huge loss in 1991 (about US\$22 million) was a mere 7.2% of the company's net value that year. Since the computer industry worldwide was also suffering from a recession, such a loss was relatively not serious. They thought a one-year loss should not negate the achievements over the past few years.

What was touching and memorable for me was that during the shareholders meeting that year, there were no criticisms similar to those often heard in other companies' shareholders meetings. On the contrary, many minority shareholders spoke up in recognition of Acer's performance and their support for me to remain on the post. Due to their unanimous support, I continued on as Acer's chairman and CEO, and went through

difficulties together with the company.

During this period of time, though some media and outsiders had certain criticisms towards the company, fortunately Acer's major shareholders, like other minority shareholders, trusted and supported the direction of the company. This attitude enabled Acer to maintain a simple decision-making environment.

Looking around, it is really difficult to find a good operating environment in Taiwan, be it in political parties, government agencies, or even big enterprises. Due to various tussle for power and authority, a lot of policies were twisted and resources wasted. Look at the many corporate leaders who have to waste their energy while the company and market investors fight for shares and control every year. Many professional managers are discharged as they hold different opinions with the investors, and many second-generation managers are restrained and controlled by first-generation corporate leaders.

A good operating environment does not come naturally. Since the preliminary stages of Acer, we have been trying to mold an environment that had the least interruption so that most employees would be bold enough to take up their responsibilities. This requires long-term efforts without any selfishness. If a decision is made with selfish intentions, it not only creates deviations in the corporate direction, but is in fact encouraging our employees to become selfish as well. After years of effort, we have generated an internal cohesive force that concentrates all our employees' strength. With such strength, we then have a stronger reputation to attract more resources from outside, be it capital, talent, or consumer confidence. This in turn creates an even more stable and effective operating environment.

Pioneering New Capital-Raising Models

Since Acer was co-founded by a group of people, our way of securing capital has frequently been the first of its kind in Taiwan.

Take the employee stock ownership program as an example. Since some employees were unable to pay cash all at one time, a certain amount was deducted from their salaries regularly to enable them to participate in the program. Through this system, we laid the foundation for our "common interest" practice and were able to secure long-term capital

required for business growth. In 1988, Acer became the first Taiwan company to secure financial sources from international investors such as Citibank, Sumitomo Bank, Prudential Bank, Hambrecht and Quist, and Chase Bank. The issuance of special shares for the TI-Acer investment was also the first of its kind in Taiwan.

Two other important cases worth mentioning are API's investment in Penang, Malaysia, and ACI's initial public offering in Singapore.

When API planned to establish its Penang plant in 1989, it did not have sufficient capital on its own. On the other hand, we did not want to invest too much before the overseas operation became stable. More importantly, as the Taiwan government still held a conservative attitude towards overseas investment, it was difficult to remit a huge amount of capital overseas. Hence bank loans became necessary.

Citibank was one of the first banks to offer a loan to API. However, to protect local banks, the Malaysian government prohibited foreign banks from loan transactions with local enterprises. Therefore, Citibank conceived an alternative in that API would issue US\$5 million in special shares, redeemable after three years. When it expired, API would redeem the shares on face value, along with some interest payment. Though a loan in reality, it was also a form of special shares. With it, the Penang plant was able to secure more capital, and as such API was eventually able to secure sufficient low-interest export loans from the Malaysian Central Bank.

This financial arrangement has created a win-win result for API, Citibank, and Malaysia. Citibank was able to make money from interest on the loan, and API's Penang plant started with a healthy financial structure and went on to become a very important manufacturing base of peripheral products within The Acer Group. And as the Penang plant continues to grow, we employ and train more local citizens.

In 1995, ACI went public in the Singapore Stock Exchange and collected US\$57 million in capital by releasing 25% of its shares. The capital secured has far exceeded Acer's original investment in ACI.

While there were other Taiwan companies with similar listings in overseas stock markets, their sizes were not as large as ACI's. ACI's shares were also booked several times over, which has a positive influence on investors' willingness to take on new shares to be issued in the future. In terms of the size of the IPO and the stock trading situation, ACI could be

the most successful offshore IPO case among all Taiwan companies to date.

Our pioneering measures in raising capital have attracted extensive attention from the business field. Some business associates often asked why Acer was always able to attract capital. This goes back to the issue of creating a conducive operating environment.

Sharing Ownership and Profits

As mentioned in the previous chapter, I never worry about losing control. For the past twenty years, while my family's percentage of share in Acer has been decreasing, Acer has been getting more investment partners, thus widening and strengthening our capital base. More importantly, the more money we make, the more shares we have to dilute. Many corporate leaders will hold on to their shares while the company is profitable, and hastily invite others to invest while the company has financial problems. What will you do if you are invited? Alternatively, sharing ownership while the company is profitable allows us to acquire reasonable financial resources in return and allows the company to continue to grow. This is better than a hasty selling of shares at cheap prices some day which may endanger the company's survival.

Also, we never raise capital with a mind set of "printing stocks in exchange for bucks."

Any enterprise, of course, would like to collect capital in a low-cost and effective way. For Acer, raising capital is to ensure the long-term soundness of our financial structure rather than to make money by issuing stock. For the benefit of our shareholders, what we pursue is a reasonable price. From an investment viewpoint, if there is no room for investors to make a profit, will they be willing to invest again the next time around? As such, how can we attract stable financial resources on a long-term basis? There is no definite method on how to set or determine the price of shares. Evaluation criteria may include net worth of the corporation, the overall environment, and the company's eagerness to get additional cash. For example, our selling price for Acer Sertek and API stocks (1.5 times the net value) is considered low according to current market values. However, due to the then-bearish capital market as well as the Group's urgent need for long-term capital, our selling price could be considered reasonable.

Simply speaking, our principle is for everyone to make money.

Most importantly, before looking for investors, a company has to create a healthy financial environment, that is, a good reputation.

True for any company, as long as business growth exceeds the growth of profits, the company will have to secure capital in order to strengthen its financial structure. Therefore collecting capital is a common corporate behavior and any corporation has to make preparations for securing long-term capital. Tactics such as “making up” revenues or polishing financial reports to get bank loans only work for a short time. The fundamental solution is for a corporation to build its reputation, make its financial status public, and be responsible to all shareholders.

Respecting Minority Shareholders' Benefits

Such habit and state of mind must be instilled when the company is still young.

Before Acer's employee stock ownership program took place, many other companies in Taiwan had the same program. However their system and implementation were quite different from Acer's. For instance, employees were not provided with detailed corporate financial information before they joined the program, and they had no idea how the stock price was determined. After joining the program, stock certificates were kept with the company and employees were not even informed of the company's annual financial or operational status. This deprives employees of their rights and benefits as shareholders.

Before Acer went public, as we already had hundreds of employee-shareholders, we had to create an open and fair financial environment. For instance, we set a rule that required employees leaving the company prematurely to sell their shares back to the company. To take care of both parties' benefits, we had to have a way to simulate a market with publicized stock prices and a stock index. Hence the company's board of directors meeting would announce the latest corporate financial information every quarter, with net value as the trading price. The company would also pay interest for the period between the net value announcement date to the actual trading date.

Three years before Acer's stock went public, we role-played the shareholders meeting internally every year so that our employees could

learn how to exercise their power as shareholders. More importantly, I also learned how to face my bosses (shareholders) and to clearly communicate the corporate development status and future strategies. Meanwhile, we also invited several executives to attend the board of directors meeting every year as apprentice directors' for them to understand the decision-making process in the company.

This system has been implemented for many years with gradual improvements.

Shares are Like Public Opinions

Acer has instilled the concept of respecting minority shareholders since the company was founded (any decision has to get the approval of a majority of the shareholders). While shares were gradually diluted from a few executives to most of the employees, the five co-founders still took a controlling role. Even so, we never intended to dominate issues with our advantages. On the contrary, we often set aside our authority as major shareholders.

I have had a basic belief since the implementation of the employee stock program, which I still believe to date. If investors oppose me, there may be three reasons. First, maybe that my viewpoint is not reasonable or not justified; hence I have to improve. Second, though I am justified, maybe my viewpoint does not conform with regulations; I still have to improve. Third, if I am justified both legally and sensibly, then I will fight to the end for the interest of the company.

If a corporate leader takes advantage of his shares majority to apply suppressive measures, minority shareholders will not concur willingly in their hearts. Though it may appear as if the corporate leader is in total control, in reality the company may be plagued with corruption, low morale, and a tarnished corporate image. Once the leader is no longer in an advantageous position, it is inevitable that other people will rebel.

Share holdings are like public opinion polls, except that it is not one vote per person. However their influence to the cohesion or dilution of the authority foundation is the same.

I think if respect for minority shareholders was not cultivated early enough, and if the few co-founders had utilized their position or advantage in pursuit of personal benefit, Acer would not have been as successful as it is today.

Mutual Trust is Key to Getting Along with Others

Along the process of creating a good operating environment in Acer, another big shareholder, Mr. Glyn Ing, has played an important role. After Mr. Ing invested in Acer, my share was reduced accordingly. However as he had always been supportive, our total shares helped maintain a stable condition for the company.

Before Mr. Ing formally invested in Acer, we had known each other for many years due to Chiao-Tung University alumni meetings. He often asked me if I needed any support. But we did not find the opportunity to cooperate. In 1983, I joined Mr. Li-Teh Hsu, then Minister of Economy, in surveying the venture capital environment and system in the U.S. After returning to Taiwan, I discussed the venture capital concept with Mr. Ing and he showed great interest. As a result, we established Multiventure Investment Inc. with around US\$6 million in capital from Mr. Ing while I was responsible for management.

However, running the two companies at the same time presented a certain conflict of interest. Hence I suggested a share swapping method wherein Mr. Ing would own 15% of Acer shares while Acer would own 30% of Multiventure shares, making it a member of The Acer Group. Years later, the partnership was extended further when Mr. Ing converted all his Multiventure shares into Acer shares and reached 25% of ownership. Meanwhile, Multiventure became a fully owned Acer subsidiary.

Entrepreneurs who wish to start their own high-tech business often have to seek financial support from non-high-tech-oriented investors. If the two parties disagree on any corporate decision, it often results in a conflict between the professional executives and the investors. The reason this did not occur in Acer was because Mr. Ing and I had the same number of shares, and I spent much time and effort in running the company. Most importantly, we trust each other.

Mr. Ing was in the construction business and did not know much about the electronics or high-tech industry. However, he was always very supportive of Taiwan's development of the high-tech industry. Also, he supported our efforts in promoting a brand name, and our strategy and direction in the semiconductor investment. His support gave our employees and the management team much confidence. Mr. Ing never wanted to get involved in the operation of the company, and even

declined our request to make him Acer's chairman. Even so, we still repeatedly invited him to participate in our operation, and took the initiative in asking him to recommend financial executives to win his confidence in Acer's open and candid operation.

The reason most investors and professional managers cannot work together is due to the lack of mutual trust. The investors, who are usually laymen, want to control the development of the corporation, while professional managers are not willing to be led by greenhorns. However, the investor usually gets nervous as he does not know anything about the business. As he becomes more eager to get involved, the professional manager becomes more defensive, which further deepens the doubt and mistrust between them. Even though they do not openly break up, gaps already exist between the two.

Hence creating a healthy and simple operating environment is in reality a very important strategy for a company. It concerns the confidence of all investors, and further influences whether the company can secure the capital required for long-term growth.

Acer America a Turnaround Model

Of course there are disagreements among the executives. When our U.S. operation continued to suffer huge losses, partners held different views on whether Acer should retreat from the U.S. market. As there were many different opinions on how to run the operation, I openly asked for volunteers to personally prove his views in the U.S. market, but no one wanted to go.

After the discussion, nobody was insistent on his viewpoint anymore, and no one had the courage to take up the responsibility.

As there was no further input, I had to take the decision-making responsibility. While we concluded with making Dr. Ronald Chwang the president of Acer America, I announced in the press conference that I would be responsible for the performance of the U.S. operation. In doing so, I wanted to give Ronald a simple operating environment wherein I could shoulder the pressure in Taiwan by asking all the investors to trust me, and let me trust Ronald so that he could run the business without any interference.

Today, Acer America is not only profitable, it has also entered the top ten list in the U.S. market. Acer America's timely initiation of the Aspire computer further elevates the whole Group to another level of achievement. I believe the performance of Acer America has not disappointed the investors.

A fine operating environment is abstract and intangible. However it generates revenues for the company and plays a key role in enhancing morale and teamwork among all employees. It does not require a huge investment but its impact is solid and far-reaching. To be or not to be, it is simply up to the corporate leaders.

Acer's Growing Pains

- Straight thinking:** A Chinese saying: once bitten by a snake, one will be afraid of seeing even a rope all his life.
Reverse thinking: Analyze how one is bitten and next time one will know how to prevent it.
- Thinking logic:** One should accept the failure that has already taken place, but should not submit to his future fate. As it may happen again in the future, one has to get prepared early.

When Acer ran into trouble, the media and executives of other companies said it was due to Acer's excessive aim for high growth. Is the pursuit of growth a mistake?

I think growth is a goal that corporations have no choice but to pursue. As for the method and pace of growth, it is related to our capability and the external environment. In other words, there is nothing wrong with growth, the problem lies in judgment and the pace of implementation. And it is hard to set a standard for measuring these. If we do not experiment and try, we will never know our full capability nor the speed and method with which we should pursue growth.

In pursuing growth, Acer tries to maintain a right direction and adjusts speed and implementation flexibly. If we get unsatisfactory results, these are problems of capability, not the pursuit of growth per se.

But viewing from another angle, our success today is due in part to the fact that we paid the "tuition" earlier and more bravely than others.

That's why we have acquired the capability to lead. We can say that our mistakes in the past have contributed to our success today.

In fact, no matter what sort of frustrations a corporation may encounter, there are many opportunities to reverse the tide during the process. Severe losses are often the result of accumulated mistakes, not of one single mistake. Therefore it is important to conduct self-reviews when running a business. Once in a while, I will remind executives of each business unit to pay attention to certain areas, which are the lessons I have learned from mistakes in the past.

These lessons have cultivated Acer's size and wisdom today.

The story has to start from Multiventure Investment Inc. which was established in 1983. The failure of Multiventure was due to our unilateral thinking and insufficient understanding about venture capital and the business environment in the U.S.

Wrong to Enter the "Venture Capital" Business

Our idea was simple in setting up Multiventure. We thought that Acer had the start-up experience to share, and we could provide a seed fund to help young people start new businesses. Moreover, to grow the company, we definitely could make use of technologies transferred from Silicon Valley. If they needed to lower cost, we could also send people over to support them. It was under such considerations that Acer invested in two Silicon Valley companies: Minerva, a semiconductor company; and Sun Tech, a system R&D company. Minerva subsequently opened a subsidiary in Hsinchu Science Park, Taiwan.

Our idea was that under the financial support of Multiventure, we would help them lay a good foundation and get past the start-up stage which was often the most difficult stage in business. Then they would be better qualified to look for other investors for second- or third-round financing. We did not want to control the operation of the two companies.

On the other hand, we did not set profit targets for Multiventure. When Acer was established, we didn't have these goals either. We were only doing things that we felt worthwhile morally and financially, and we made money in a natural way. That is why we thought Multiventure would be the same.

However, subsequent developments went beyond our expectations.

Looking back, we now understand that “too much love can hurt.” As Multiventure was generous in extending support, it also made these companies too reliant. Whenever they encountered difficulties and asked for help, we would do our best to solve it for them. Therefore they were not aggressive in looking for other sources of capital. By the time we realized this was wrong and started to set limits, it was already too late.

Besides, the interactive relationship between U.S. entrepreneurs and Taiwan was not mature. There was a lack of trust. Hence the more they relied on us, the more they felt insecure. While needing capital, they worried about losing control with too much investment from us. They also worried that one day when all the technologies were transferred to Taiwan, their investments would be left unprotected. Under such a conflicting state of mind, they were hesitant to push through with new investments. Normally, if they were afraid of being too reliant, they should look for other investors as soon as possible. However, as they were late in taking such actions, with business conditions deteriorating, other investors had no confidence as well.

As a technology transfer case, these two investments did not turn out to be fruitless. In 1984, Acer cooperated with Sun Tech on a workstation project. This experience helped us in 1987 when we developed a world-leading 32-bit PC ahead of IBM. But from the viewpoint of investment returns, Acer's involvement in venture capital was a failure.

When a company enters a growing phase, it often makes an investment decision based on one strategy. Our strategy at that time was to generate synergy by sharing resources, that is, invest in Multiventure to build opportunity for vertical integration. Looking at it today, our mistake was that we did not assess the investment from a disintegration point of view, which was the direction of PC development.

Our views are much different now. We recognize the benefits of generating synergy, but at its start-up stage, it is more important for a VC-invested business to run independently and build up its expertise. If the business results in a synergy, this is merely a bonus. The considerations for venture capital investment should not have been mixed with that for the computer industry. However, as Acer was succeeding with its main business, we did not think through these issues thoroughly.

On the other hand, though the venture capital business eventually made it big in Taiwan, Multiventure was just too early an attempt from a Taiwan perspective. Another problem was that we could not find managers with venture capital experience to manage the company.

At that time, we asked Jeff Chen to become the president of Multiventure. Jeff was one of the earlier Chiao-Tung University alumni with the most outstanding professional achievements. Before joining Multiventure, he was president of an electronics group in Hong Kong, and had all the credentials for managing a high-tech company. However, as he did not have experience in venture capital business, and also since the company was headed in the wrong direction from the start, it did not help the situation although he had paid very close attention. Jeff was later on transferred to API to become its president, where he successfully utilized his capabilities.

During the process, Mr. Glyn Ing, who owned 70% of Multiventure, was always supportive and never interfered with our decision-making process. His investment did not suffer though. Later on Mr. Ing traded his Multiventure stocks with Acer stocks when we merged Multiventure into Acer. As Acer stocks grew in value, he gained much profit from it. I see this as God's reward for his kind heart.

Our investment in Multiventure did not generate returns financially. We later learned that there is a significant difference in attitude between Taiwan and U.S. entrepreneurs. In Taiwan, we will take full responsibility all our lives for the money received from our boss or investors; but for leaders in the U.S. business, they don't seem to have the same mentality even if they should lose all the money given.

Multiventure's mistake was that the decision was too strategy-focused and was not prudent enough. In later days, Acer's decision-making system became more mature. An organizational atmosphere of think for the company's interest was formed, part intentionally and part naturally. Colleagues are able to understand the different facets of a strategy and raise their opinions. Consequently, a strategy voiced from the highest ranking executives is no longer taken as the only guiding principle. This makes decision makers more alert and more prudent in proposing future strategies.

Small Investments (US\$500,000), Big Losses (US\$20 million)

Acer's acquisition history over the years has had good and bad results. To people outside Acer, the most familiar failures are the Counterpoint and Altos acquisitions. But the fact is, the acquisition of Service Intelligence in Los Angeles was the most serious mistake Acer has ever made. Although only US\$500,000 was invested, the total loss accumulated amounted to US\$20 million.

It is very difficult to run after-sales service in the U.S. as it is a "consumers' paradise." In 1988, an after-sales businessman from Los Angeles developed a scheme of franchising. He established a national service network by training a batch of housewives and husbands so that they could provide after-sales services. As the businessman had some business with Acer America, we learned about this plan and thought it would help Acer considerably. Therefore in 1989, Acer acquired 100% of this company with US\$500,000.

After the acquisition, we entrusted the operation to that businessman. He conducted an aggressive expansion plan and rapidly grew head count to over 100. However, the internal system did not catch up with the pace of growth. As a national service network, many pieces of equipment and spare parts were purchased but there was no sound inventory management and payment collection system. Often, goods were shipped but payment was not collected. Since the accounting books were in a mess, the financial status was therefore not healthy. Due to total delegation and the fact that Acer America headquarters was in San Jose, we simply did not control it right. There was a continuous infusion of cash, but no sign of recovery.

This was a hard lesson to me. When you own a company 100%, it is like your child. All the child's mischief and commitments outside would be billed to your account, and you have to take responsibility for that.

Misfortunes never come single. One of our products had a serious problem at that time. It took us half a year to locate and rectify this intermittent problem. There was a bad and loose connection associated with the plug supplied by 3M of Minnesota, which caused our PCs to fail intermittently.

During this period, the products that had problems were already sold worldwide. Luckily, our distributors in other countries had established

strong credit and management systems and hence were able to handle the problem well. But Service Intelligence, with an unhealthy structure coupled with this product issue, needed even higher materials inventory for after-sales service. As products had defects, business was affected, which further taxed our financing capability. All these chain effects took place within a short time.

The plug incident made us recognize our insufficiency in risk management. Therefore we had to re-establish a risk management system. Later on when a similar situation happened, the results were completely different. This time it was defective chip sets supplied by Chips & Technology. We immediately formed a task force to trace material flow, market reaction and product improvement status on a daily basis. This enabled us to track and foresee possible conditions and take proper actions. We were in full control of the situation this time and solved the problem in less than one month.

We finally had to close Service Intelligence. The loss incurred was 40 times our original investment, mainly from inventory cost and operating expense, and also including severance pay and relocation cost (moving back to San Jose). Up until the company was closed, the franchising plan had not even been started yet. Although this did not become a big media event in Taiwan, it generated considerable negative impact to The Acer Group's business and operating cost.

Even with such a huge investment, Service Intelligence did not help at all in upgrading our after-sales service capability. Later we sent a senior director who had worked for many years in the U.S. to rebuild the after-sales service system. Though he was not a professional in this field, we were able to move up to "B" from our original "E" rating. We spent considerable efforts and resources in establishing such performance little by little. The Service Intelligence lesson has again reinforced our understanding that we have to be prudent with an investment from the very beginning.

Later on when Acer developed its business in Europe and Mainland China, we made sure that we have established effective internal management before we further expand the business. Before expanding, many priority tasks have to be taken care of adequately, such as business development, product delivery and customer complaint. All these will tax and overload the company's normal operation. If the system and structure

are not established properly in advance, daily operation will become messy. As revenues grow bigger, so will the losses incurred.

Frustrations in Italy

Acer made inroads into the Italian market in 1990, but it also dragged Acer into an agonizing lawsuit.

After acquiring Altos, Acer took over its Italian office and turned it into Acer Italy. As Acer always adopts a non-exclusive distributorship, we assigned the original Altos head to terminate the original exclusive distributorship.

Acer had been prudent about this process in every country all along, but this time it did not go very well. The original distributor did not want to release the exclusive distribution rights and went to court. Moreover, they did not start with prosecution but went directly instead to apply custody on Acer Italy. This way, Acer could not conduct its business in Italy. To counter this, we had to apply for release of custody and provide several million dollars as a deposit.

What was unfair was that without any legal procedures, the court went ahead with the custody, and the plaintiff did not even have to pay deposit.

Failing to discourage us, this distributor went to the Netherlands to apply for custody of Acer Europe headquarters (Italy and the Netherlands were both members of the EU). Therefore we had to pay another sum as deposit. Later on we learned that this distributor was a key person in many cases of government officials colluding with businessmen in Italy.

It took about four years for the lawsuit to close and Acer won the case. However due to the huge depreciation of the Italian Lira, our deposit already depreciated a great deal.

If the same thing happens again, I am not sure if we can handle it in a better way.

During that time, we replaced the general manager of Acer Italy. This was due to the fact that the company lacked prudent credit management, and the bad debt ratio was much too high, especially on credit extensions to the distributor.

In reviewing the incident, I did not blame Acer Italy but instead tried to see it in a different light: If I am a Taiwan branch manager of a foreign

company, is it possible that through my authority I make my relatives act as the distributor and extend credit to him? Or maybe I can purchase from my friends and ask for commissions? The answer is: possible. In fact this happens in Taiwan, and Italy has a similar style to Taiwan. So how do we prevent such situations?

If the head of the overseas operation is the major shareholder, he will surely work hard to manage the company well. Therefore the concept of local shareholder majority seems to be the best approach.

Honestly, Acer has experienced a lot of frustrations. We even had hopes of cultivating a world-class table tennis team. We spent a lot of efforts to invite Mainland China's Olympic gold winner, Ms. Chin Chen, to join the team. However, restricted by our local environment, it was difficult to find a world-class professional team manager. Also in Taiwan, athletes do not view sports as a long-term career. As such, we were unable to build up morale even after a lot of investment. Finally we released the team and arranged for the players to join other teams.

From the operational viewpoint, table tennis, after all, is not Acer's professional field. If cultivating a world-class team is the way that Acer can make the greatest contribution, I will not submit to failures and will try my best to make Taiwan the world champion. However, since it is not the best way for Acer to make a contribution, we should rather spend resources on businesses that we are good at.

Establishing a Preventive Mechanism for Crisis

As Acer grows in size, any problems that hit mass production products such as the Aspire computer and memory chips will have a much more serious impact than before.

For instance, Intel's Pentium chips suffered for a time due to its floating-point calculation errors. From a technological viewpoint, the chance that this floating-point malfunction will take place is only one in several million cases. There is almost no chance for the average consumer to utilize such a complicated function. This is similar to the fact that most customers can accept software with a little bug. However, as Intel is a technology-oriented company, it tried to address this issue with the general public from a technological viewpoint. As customers did not understand the technical issues, Intel finally had to recall and replace all of

its defective products at an expense of US\$3 to \$4 million.

This incident was not a successful case in terms of public relations and crisis management. Even before Intel decided to replace the chips, I already had talks with some colleagues about how I would handle this case: we will openly admit this defect and assure customers that they can get a replacement within one year if any problems occur. The advantage to this approach is that the processing time is prolonged to a year so consumers will not clamor for immediate replacements. In due time, many consumers will find that it's really not necessary to get a replacement, thereby saving Intel a lot of associated expenses.

The incident did not produce too much impact on Intel. However, as a corporate leader, I have to consider that if the same situation happens to Acer, are we able to respond immediately? With so many new colleagues joining the company, how do we prevent crises and how do we minimize impact when one occurs? For a corporation, any mistakes made by its employees, no matter how low his ranking, the obligation belongs to his employers (with similar reasoning, top officials are to be blamed for government inefficiencies).

To strengthen our capability to prevent and respond to crises, there are three keys: first, we must have a sense of crisis; second, establish crisis-handling capability; and third, stay alert at all times and correct little mistakes so that they will not transform into big crises.

Sense of Crises and Timely Correction of Small Mistakes

To prevent fatal crises, Acer's approach is simple and difficult at the same time: delegation and empowerment. People who think linearly tend to believe that delegation will increase, not decrease, the chance of crises striking. However, if we do not allow employees to make little mistakes and experience it themselves, they would not learn to be careful. The chance of big mistakes occurring increases accordingly with time.

Also, we have an unofficial crisis management system: common interests. As everyone is a shareholder, they will act positively to correct abnormal conditions in the company, so problems will not evolve into big issues. This unofficial internal control system has played an important role in strengthening Acer's structure. Issues such as high purchasing cost or operating cost are reflected to the upper management through the system.

In early days, one of Acer's most widely reported management characteristics was that buyers enjoyed total delegation. New buyers are often bestowed with a responsibility of several millions in U.S. dollars in purchasing power. Many years ago some buyers were rumored to be corrupt, but we didn't make any judgments right away and instead investigated from colleagues, supervisors and past records. We believe as long as there is corruption, there will be signs. Up to now, we haven't discovered any real corruption. One employee was reported many times, so we had a direct communication with him and asked him to pay attention so as not to create misunderstanding.

Crisis in a corporation can be attributed to one single event and also to long-term accumulation. Between 1989 to 1991, as the company operated so smoothly for some time, a lot of employees became complacent which resulted in a deterioration of corporate competitiveness. This kind of crisis is even more harmful to the company as it makes the company lose sense of crisis and capability to react. That is why I always keep reminding our colleagues to maintain a sense of crisis.

Never Too Late to Improve

We often discover that some successful enterprises will unknowingly build bad reputations, such as downplaying suppliers and customers, or enjoying undue privileges by using one's authority. These companies may be tolerated by the affected parties for some time. But a company can never do everything right. And when it makes a mistake, those affected parties will unreservedly magnify the problem in a negative way. Even a small problem will turn into big trouble. Thus, even when a company runs smoothly, the corporate leader should remain humble, so should the employees.

This is not just "reverse thinking," but a "reverse operation" as well. The more successful a company is, the more humble it has to be. Acer places "human beings are good in nature" at the foremost of the corporate culture because we want our employees to remember and exercise the bright side of human nature at all times.

I think it is not a shortcoming for a company to encounter failures while in pursuit of growth. However if a failure cannot be rectified immediately, it will be a serious drawback. In Taiwan, we often hear the

term “sense of helplessness.” Government officials feel helpless in trying to increase work efficiencies, and corporate leaders feel helpless in passing down obligations or upgrading competitiveness. It always seems too late to improve the situation. However, I never give such feelings a chance when I face frustrations. I may not be able to accept a failure caused by a past mistake, but I have to admit and face the reality. “What’s done is done” means that we have to move on after we fall. In another sense, it also means that we cannot undo a mistake hence there is no sense to continue to despair.

If we continue to live in the shadows of past failures, it is natural that we find it difficult to move forward. But if we know the background and reason of why we failed, we can find the right solution and move ahead.

For instance, many corporate leaders feel that investing to upgrade the Made-In-Taiwan (MIT) image is not feasible as evidenced by experiences in the past several decades. The fact is that this is feasible as evidenced by Acer’s experience. It is only a problem resulting from a lack of will and capability.

Growth of a company depends on the accumulation of experience. When Acer was still a small company, I often told colleagues who made mistakes, “The company is willing to pay such tuition as long as lessons are learned and reasons understood.” If a sickness makes me immune to the disease, that sickness is worthwhile.

This is Acer’s basic concept, but the implementation depends on everyone’s efforts. As a corporate leader, I have to try my best to communicate such concepts, and put the concepts to test little by little so that we can establish a mutually shared mindset.

For me, such state of mind was not initiated from the first day of the start-up. It was already existent before the company was established.

Warning Signals for Starting a Business

- Straight thinking:** A company should make profits first before it makes contribution to society.
- Reverse thinking:** A company should contribute to society during its business operation process to fulfill its ideals.
- Thinking logic:** If a company pursues profits regardless of laws or ethics, the company may hurt society in the process.

When discussing Taiwan's competitiveness, the academic field mostly centers on the industry's network of medium and small businesses. Aggressive entrepreneurship is indeed an important part of Taiwan's competitiveness. However, statistical data shows that 60% of Taiwan's corporation closed down within five years of establishment. Entrepreneurship is certainly full of risks!

As it is difficult to start a business, how do we reduce risks and sustain company operation? This not only relates to the investors' benefit but also relates to the overall social resources. I think there are two important qualifications for an entrepreneurship to become successful: capability and accurate goal. The driving force behind the two is the perseverance to learn and to contribute to society.

There is no other way to accumulate capabilities except by "learning." To train its employees and management team, a corporation must be willing to pay tuition so as to cultivate their capabilities. However, the price paid to build up management capability is much higher than academic tuition. Hence I think the first mode for corporate leaders to cultivate capability is to learn in a low-cost way. It is like shaving a watermelon first to learn how to do haircut.

First of all, the most economical way to learn are lessons for which we do not have to pay. In other words, we should learn by using others' capital and experience. Before starting a business, we should listen more, look around more, read more, and cultivate an analytical mind. We'd better not start a business if we don't have sufficient capability, unless we have abundant capital.

I was 32 years old when we founded Acer. Before then, I had the experience of managing from three to a thousand people. However, watching others make money does not mean I can make money the same way. The successful strategies that I developed during my days as an employee do not guarantee my future strategies would work too. When starting a business, you should prepare for the worst condition as there are often unpredictable situations.

Moreover, though some experience can be learned from others, there are some that we must go through ourselves.

When we founded Acer, the co-founders agreed that once we cannot sustain the company's operation, some partners had to get other jobs to maintain the operations. This is a preventive measure.

Winners Who Know How to Concede Defeat

As a lot of management capability has to be experienced individually, another low-cost learning mode is to learn from the small mistakes committed when the company is still small. The logic is simple, but look around us, people use excuses such as bad luck or blame it on other people's fault. If a corporate leader fails to learn lessons from failures and corrects his own mistakes, he will eventually pay a bigger tuition for his stubbornness.

To learn from mistakes, an entrepreneur has to learn to admit failures.

A mistake often cannot be discovered readily when it happens. However, the party concerned knows it very clearly. If he cannot admit to the failure sincerely and correct it immediately, the evasion of responsibility will only magnify the mistake. This is as if a person has a certain bad lifestyle and becomes weak. It is hard for others to detect this except the person himself. If he cannot adjust his daily schedule and get rid of the bad habit, he will soon be down and out.

In fact, the person who is brave enough to face failures is often the final winner. This is true in managing a business as well as in any other undertakings. Only by admitting failures can we have the chance to improve.

For instance, when a decision-maker is not clear about the serious impact that might result from extending credit, he may suffer once due to credit extension. The bad debt may not appear on the financial report as the company is still making money. But the executive knows that he made a mistake due to carelessness or poor judgment. If he is able to learn from this mistake and become more prudent with customer's credit, his management capability is upgraded unconsciously. However, if he overlooks this issue as the company is making profit, there will be more and more bad debts. When it becomes impossible to cover up the financial trouble, the leader will be busy resolving crisis and have less chance to make any improvements.

It is like playing a baseball game. During the game, you may have a few misses and yet win the game. Will you analyze why and how you missed? Or are you satisfied with just winning the game? Such simple difference in attitude will result in a totally different chance and capacity to learn.

This is the simplest and the most important concept in our lives: make use of opportunities to help us grow.

Of course, as everyone's gifted nature is different, the ease with which a person upgrades his capability is also different from another person. When a baseball team has reached a certain professional level, they have to make use of external help (e.g. looking for a coach) to help them further improve.

Big Capital, But Small Bet (Risk)

While a company evolves from start-up stage into the growth stage and faces greater challenges, the management capability of the corporate leader also has to be enhanced as well. The second mode for corporate leaders to cultivate capabilities is to pay tuition continuously to create an environment conducive for the company to maintain continuous growth. Therefore, when a company begins to make money, profits cannot be totally spent. Part of it must be kept for paying tuition to accumulate capabilities.

The first driving force behind creating the environment is that the corporate leader must have an open mind, be willing to attempt new things, and not be afraid of failure and frustration. If all attempts work out successfully, then this tuition is even better paid.

The second driving force is that the corporate leader has to question from time to time whether his own ability is enough. This is not a demonstration of insufficient confidence, as these leaders surely have confidence of winning before they enter the competition. The meaning of the statement is that the corporate leader has to maintain a sense of crisis all the time and make preparations for the future. For instance, there has to be sufficient capital. We can do \$50 business when the capital is \$100. But before the \$100 runs out, we have to figure out how to get the next \$100.

It is because the resources and capabilities of a company is always limited and insufficient. Therefore we have to learn and enrich ourselves all the time.

From practical cases, when we estimate that a goal can be achieved with \$100, the result is that we often exceed the budget. The TI-Acer investment is an example. It is human nature that we have too high

expectations of our capability and opportunity. When defining strategies, managers have to recognize the traps that may be caused by human nature, and be prepared to gather more resources from time to time. Otherwise, once the resources are used up, all the past efforts will be wasted.

I believe many managers have the same experience that while executing a business plan, the result is often below the target while the expense is often higher than budgeted. Therefore, these factors have to be considered in the planning phase to maintain flexibility through backup resources.

An important operating principle in Acer is that we only set targets that we can meet. For targets that we feel unsure of, no matter how lofty they are, they will be set aside to wait for an appropriate timing (for instance the idea of Microprocessor I was set aside for 5 years). If we cannot restrain ourselves and pursued something prematurely, this will definitely result in failure. Therefore, we can only follow a step-by-step approach to nurture our capability before achieving the targets. During the process, we will not only realize the targets but also upgrade our capability.

Under this operating principle, even if there is an investment that may generate several times of return but the risks are fatal to the company, we will not give it a try even if the failure rate is only one in a million times. This corresponds to a usual Chinese thinking, "the capital has to be big, the risk has to be small."

Be Firm on What We Know, Pretend not What We Don't Know

Besides low learning cost and creating an environment for continuous learning, a business leader has to continually enhance his own management capability. At the same time, he also has to nurture the capability of 'knowing what he knows, and not pretend to know what he does not'.

Maybe some people will feel that this famous statement from the Confucian Analects is an aged theory. However it is not as easy as we imagine to implement it in a corporate environment. We frequently find corporate leaders, thinking that they have total understanding, get involved in businesses that they actually don't know about and thereby

endangering the original business. How many bosses, knowing that false bookkeeping is both dangerous and against the law, still go ahead and do it?

My interpretation to this statement contains the philosophy of aggressive implementation. For things I do not know I will not stick to my opinions. However, once I understand it clearly I will persist and implement it in the corporate operation without being affected by short-term benefits or other burdens. I think if one cannot persist and implement what he knows, it is only as good as not knowing it. Between knowing and not knowing, there is a gray area for those things that I feel vaguely about. For things that I am not so sure, I will not jump to conclusions. If not necessary, I will not make any decisions at all.

Among the gray areas, there is a part which can be learned through scientific analysis or accumulation of experience, and it becomes a known part after you learn. For instance, we had a vague idea about intellectual property rights in the beginning. However when we found that careless infringement of others' patents will result in bigger losses, as proven by the experience of other corporations, we have to focus and implement systems to prevent patent infringements. Only by moving from half knowing to knowing can we equip ourselves with stronger R&D capability and build a reputation for respecting IPR.

A very important concept is that the capability of "knowing what we know" has to be implemented together with the capability of "willing to admit failures." In other words, when we find that we think we know something but really do not, there is no sense to persist. For instance, when our knowledge is insufficient and we gave a wrong statement in public, we have to correct it right away.

We often found that the reason a corporate strategy was not implemented successfully is because the decision-maker, thinking that he knew, made decisions based on the wrong basis.

Once he found he cannot make a go of it, he simply give it up without further familiarizing himself with the new knowledge.

A Little More Persistence

Furthermore, when a corporate leader is making a decision, some factors may already be known while some factors remain gray. The

decision-maker has to evaluate whether he should take actions after all gray areas are clarified or can he proceed with the factors that he already understands. This is like inviting someone for dinner without an idea about his impression of me. The invitation, however, does not have to wait until I confirm that he likes me.

In other words, some uncertainties will not necessarily impact our action. If a leader can clarify the key points and logic in between and establish a complete thinking and decision-making system, it will help to grasp the key points within the shortest time.

I call this type of concept a “non-theory” concept — a kind of ideal and concept that are not easy to implement but are achievable. It is like playing balls, even if we are not gifted, if we know certain skills that can beat the opponents, we will be able to defeat our rivals with these skills after assiduous practice. Most people can understand a concept like this. But like the skills of playing balls, it can be discussed to a great extent by everyone. However, without hard training, one never can use it on the court.

Acer’s success today is due to a little more persistence that we have than others.

For instance, I think it is normal that crisis happens in enterprises. It is abnormal if there is no crisis at all. Therefore, a company has to continuously accumulate strength and cultivate talent even though it is not needed immediately. This is a fact we must adhere to.

My operation logic has always been guided by some basic principles, such as long-term investment, honesty, reputation, and thinking in other people’s shoes. These are concepts we all know since childhood. The problem is everyone has a different definition of these principles. Therefore whether someone is honest or not depends on other people’s instinct and judgment.

In other words, the judgment is not obtained through legal recognition or debate, but through the recognition of the majority. The majority is not 70 or 80% but over 90 or 95%. That is to say, we have to achieve a degree that even intentional distortion cannot undermine a fact.

Only decisions that are made based on these basic principles can maintain consistency and logic, and will not be altered due to changes in external environment.

My Goal — Contributing to Society

As entrepreneurship is a long and difficult process, the corporate leader has to continuously upgrade his capability. However, to motivate ourselves in the pursuit of personal growth, we must have a long-term goal to guide our efforts.

Everyone can have a goal. I was often asked about the difference between Acer and other's goals. For Acer and myself, the common goal has been contributing to society, while most corporate leaders' goal is to make profit. That's the only difference.

Because my life-long goal is to contribute to society, it is a never-ending goal as contribution is endless and so is the pursuit of improvement. Therefore if I do not grow, share, and be humble, I will not be able to continue with my pursuit. If making profit is the goal, once the target is achieved, there is no motivation for further improvement. In other words, if making money is our target, there will be defects and discrepancies in our thinking pattern towards life and business operation.

We often observe that when a certain stage is reached, many companies will stagnate or change its corporate nature. It is because many corporate leaders treat making money as their goal. Once the company makes money and achieve initial success, the corporate leaders will feel that they can relax and enjoy. Complacency and a lack of motivation often result in a change in corporate quality.

If the company is aiming to contribute to society, they will feel that their obligations are unfulfilled, and will continually accumulate strength to overcome crises. Once capability is accumulated to certain levels, the company enters another higher phase of corporate development.

As I consider contributions to society to be my life-long goal, while most entrepreneurs complain about rising personnel cost hurting their competitiveness and try to boycott bills that increase employees' benefit, I hold a different view. I think increasing the employees' income is the responsibility of an entrepreneur towards the society.

Under this premise, if a company is not capable of achieving this in a short time, it can do a little bit more each time. For instance, Acer's laying off of its workforce was face-losing in the short-term, but we have been able to keep the company going and continue to contribute to society. If we stop making contributions with the excuse that we do not have

enough resources, the value of a corporation's existence vanishes.

Of course, at a time when most companies are good at creating corporate images, a large number of companies claim social contribution as their corporate slogan. The problem is whether they have really achieved it or do most people think the same way? Are those contributions made by the corporate leaders really of help to the society?

Many people think that making contributions is equal to donating money to civic programs. My personal view about social contribution is different. I am never enthusiastic about participating in civic programs because I always believe that by managing the company well, I am making the greatest contribution to society. Thinking further, what is my strength? The answer is running business. Therefore running a company has the highest efficiency among all the contributions I can make. When the company makes profit, we continue to expand by investing, hiring and cultivating more people. Its contribution to the society will be no less to sponsoring civic action programs.

Therefore, I think a corporate leader has to implement the ideal of contributing to society during the process of business operation, that is, run a business with social contribution as the goal. But some people think social contribution can wait after they make enough money. With this mindset, they will not care whether the money is earned in a proper way or not. They will conspire with government officials, speculate, suppress employees' rights and neglect consumers' benefit. As they want to make more money, the company will have excuses for producing bad-quality products or taking advantage of others.

This slight difference in mindset results in two completely different outcomes. Therefore, it is obvious which way makes more contributions to society.

In fact, some businesses that do not have positive influence towards society but even produce negative influence are usually the ones that are most enthusiastic about participating in civic programs. They are spending money to buy peace of mind, but I do not have to as Acer has contributed no less to the society than any other enterprises.

If I am not capable of running a business that is contributing to the society, I might as well work as an employee and make less contributions. Why would I do something harmful to the society and then try to make up?

My desire can either be big or small. My biggest desire is to do my best as long as I have the capability. I will also feel comfortable even if I have to be a nameless person. That was my style when I was a student.

Therefore, even though entrepreneurship is strenuous, I never feel exhausted as I always do my best and know my limits. As long as the company does not collapse or is not deep in debts after its closure, there is no need to worry. Although we have misjudged some situations in the past, when the target is re-adjusted, we can break through any difficulties.

Easy to Charge Ahead, Difficult to Back Down Safely

Over the past twenty years of business operation, I have a deep feeling that running a business is like leading an army. It is easy to lead the army in an attack but difficult to ensure their safe return in the face of danger. This is evidenced by Acer's frustrations in the U.S. market.

Therefore, a corporate leader has an important social responsibility: when "luck" is not on our side, we should step down and not impair the whole organization structure.

Most corporate leaders declare that they treat the companies as their beloved children. However, some of them, when incapable of handling their role as leaders, often take devastating actions and destroy the company by taking away the company's possessions. If this happens to others, these people will come up with a rational analysis to demonstrate that such behavior is wrong. However, when the same thing happens to them, they will argue with the reason: "The company is mine and I have the right to do so."

This is true not only with corporate leaders. The same situation also applies to many employees who are unwillingly forced to leave their posts. They retaliate by not handing over their duties properly. Many people can consciously or unconsciously do things which hurt the people and things they love.

It will not be like this if the leader really loves the company. The reason I try to cultivate so many successors is that I want the company to be better after my retirement. If we truly love the company, we will do whatever we can to ensure the company's continued operation. If we truly love one person, will we destroy our beloved when we ourselves are unable to survive?

Therefore, when a company is failing, what the corporate leader has to consider is how to protect the company instead of staking everything on one single blow or do something against the law.

Some corporate leaders voiced out the following when their companies were about to close: "The company is mine. I will stand up again for the sake of the company." Something is wrong with this statement. If a corporate leader truly cares about the company, he should retire to save it when crisis occurs instead of letting the company slide to an unrecoverable condition.

I always hold the philosophy of "save lives, not save faces." If a corporate leader only cares about not losing his face when the company is in trouble, he will end up endangering the company even more.

Unfinished Contest - A Mission Forever

In fact, this is true not only for companies, but also for many political figures who lose their sight during critical moments. The reason is because of the many bad examples polluting in society from which most selfish people can obtain immediate benefits. Through media propaganda, it misleads the general public into thinking that caring for personal privileges is the only way we can benefit oneself the most.

In the past, the force that restrained ill behavior came from the general regard to ethics, such as "comeuppance will come eventually." In an agricultural society, people start work before sunrise and rest after sunset. Their chance of breaking the law was much less, and therefore ethics is more than enough to restrain human behaviors. Today, our lives have become more complicated and tense. The new things we encounter in a month may be more than that of our ancestors in several years. Ethics is no longer sufficient to maintain social order and we have to depend on law and regulation.

Unfortunately, Taiwan's current condition of law enforcement is not so effective. There is no visible punishment to criminal actions. At the very least, there is no real action to counter not-so-legal activities. This results in a dramatic rise of negative examples. Unless we have strong self-restraint, we will easily get lost among the many paradoxical situations.

The reason why Acer sticks to the goal of making contributions to society is to walk our own way with no selfish intention and not pursue instant gratification. We want everyone to believe this path will be a long and stable way.

As Acer has evolved to its current stage, the driving force behind me to achieve greater social contribution has entered another phase.

I often encourage our employees with the following statement: "As we now have greater capability and are standing at where we are today, if we do not go ahead to realize our ideals and if we are unable to establish a better foundation for future generations, we are simply as good as not having accomplished anything worthwhile. No other people have better opportunities to contribute to society than we do." If we do not build a solid foundation, upon which our next generations can rely, we shall be blamed forever in history. It is not that we think too highly of ourselves or too ambitious in our pursuit of idealism, it is a responsibility that we must shoulder. Since we have not accomplished our mission, Acer's pursuit of its ideals and contribution to society shall be forever continued in the days ahead.

The past twenty years is just the beginning of the first round.

Comments by Stan Shih at Year 2004

- “Winning by accepting defeat” is an important reason for Acer’s success in the two times of corporate re-engineering. While facing the hardships, corporate must be brave to examine all the proud crucial strategies and models, think reversely, give up those proud elements, and then re-think how to face the future winning ways. I have been proposed some concepts again and again, such as “want live not face”, “accept defeat to win”, and “change mindset rather than people”. I have been hoping to remind myself and all the corporate leaders, in a hardship, to re-think the corporate future direction by careful self-examinations.

